

# Schaerer Coffee Art Plus Best Foam™

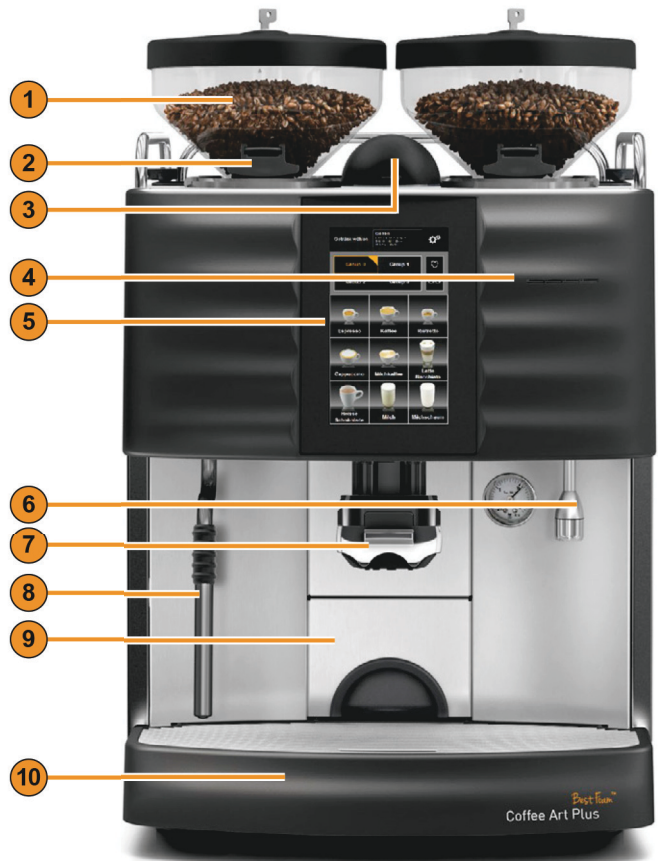
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## Operating instructions

V04 / 08.2019



- 1 Bean hopper with lid
- 2 Bean hopper lock
- 3 Inlet for ground coffee/cleaning tablets (cleaning programme)
- 4 Card reader
- 5 Display (see below)
- 6 Hot water outlet
- 7 Beverage outlet
- 8 Steam wand Powersteam (option)
- 9 Grounds container
- 10 Drip tray with drip grid



Schaerer Coffee Art Plus Best Foam™

- 1 Statusbar
- 2 Quick info
- 3 Selection list: Standby mode
  - [Quick Menu] field
  - [Cancel] field
- 3 Selection list: „Operator“ mode
  - [Cleaning] field
  - [Rinsing] field
  - [Flavour Point] field
  - [Cleaning touchscreen] field
  - [Quick info] field
  - [Standby] field
- 4 Pre-selection field [Decaf]
- 5 Pre-selection field [ 2x ] / [Barista] field
- 6 Beverage group (programmable)
- 7 Beverage field (programmable)



# Schaerer Coffee Art Plus Best Foam™

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## Operating instructions

V04 / 08.2019

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# Table of contents

## Introduction ..... 6

Welcome .....	6
Signs and symbols .....	6

## General safety notes ..... 7

User at risk! .....	7
Risk of machine damage! .....	10

## Product description ..... 11

Intended use .....	11
Beverage types and output .....	11
Models .....	12
Scope of delivery and accessories .....	12
Options and optional accessories .....	12
Technical data .....	15
Serial plate .....	16
EC Declaration of Conformity .....	16
Manufacturer's address .....	16
Applied standards .....	16

## Installation and commissioning ..... 18

Setting up machine .....	18
Location .....	18
Ambient conditions .....	18
Power supply .....	18
Conditions .....	18
Connection values .....	19
Water connection/drain .....	20
Conditions .....	20
Connection values .....	20
Installation .....	20
Disassembly and disposal .....	21

## Operation ..... 22

Check before switching on .....	22
Switching on .....	22
Starting the PC board .....	22
Standby quick menu .....	22
Switching on coffee machine (touch screen) .....	23
Service menu .....	23
Quickinfo .....	23
Optional accessories .....	24
Main touch screen window .....	24
[Barista Silver] standard .....	25
Control fields .....	27
Beverage selection with groups .....	28
Beverage groups .....	28
None (all beverages on one page) .....	29
Options before/after beverage selection .....	29
Self-service .....	31
Filling and connecting .....	32
Coffee beans .....	32
Water .....	32
Milk .....	32

Coffee machine powder .....	33
Flavour Point (option) .....	33
Dispensing .....	33
Adjusting outlet height .....	33
Coffee beverages .....	34
Beverages with ground coffee .....	34
Hot water .....	35
Milk beverages .....	35
Flavoured beverages .....	35
Steam .....	36
Dispensing options .....	36
Stopping continuous dispensing .....	36
Pre-selecting beverages .....	36
Double beverage .....	37
Emptying .....	37
Grounds container .....	37
Under-counter grounds disposal .....	37
Waste water tank .....	37
Transport conditions .....	38
Display messages/instructions .....	38
Switching off .....	39
End of operation .....	39
Lengthy downtimes (more than 1 week) .....	39

## Cleaning ..... 40

Cleaning intervals .....	40
Cleaning products .....	40
Cleaning powder for the "Milkpure powder" milk system .....	41
Cleaning instructions .....	41
Cleaning options .....	42
Hot rinsing .....	42
Automatic rinsing .....	42
Daily cleaning .....	43
Automatic cleaning programme .....	43
Touch screen .....	43
Milk container .....	44
Drinking water tank .....	44
Grounds container .....	44
External waste water tank .....	44
Side cooling unit .....	44
Automatic beverage outlet .....	45
Manual weekly cleaning .....	45
Bean hopper .....	45
Defrosting cooling unit (Option) .....	45
Flavour Point (option) .....	46
Schaerer Coffee Art Plus mit Pulversystem (Option) .....	47
As needed .....	49
Flavour Point (option) .....	49
Drip tray .....	49
Cup warmer .....	49
Disassembly/assembly of outlet protection .....	49
HACCP cleaning concept .....	51
<b>Service and maintenance ..... 52</b>	
Maintenance .....	52
External water filter? .....	52

<b>Programming</b> .....	<b>53</b>
Navigation .....	53
Setting examples .....	54
Enabling/Disabling parameters .....	54
Selection list .....	54
Adjusting setting range .....	54
Parameters with lettering .....	54
Parameters with numbers .....	55
Standby quick menu .....	55
Entering the programming level .....	56
TouchIT configuration .....	56
Counters and statistics .....	59
Beverage configuration .....	61
Dispensing a test beverage .....	62
Coffee settings .....	62
Milk settings .....	63
Choco settings .....	64
Hot water settings .....	64
Steam settings .....	64
Flavour settings .....	65
System settings .....	65
Automatic timer .....	66
Cleaning instructions .....	66
View mode .....	67
Logo/Screensaver .....	67
Changing standby logo .....	67
Changing screensaver picture .....	67
Image and file formats .....	67
<b>Troubleshooting</b> .....	<b>69</b>
Faults in the Best Foam™ milk system .....	69
Errors with display message .....	69
Errors without display message .....	71
<b>Precautionary measures</b> .....	<b>72</b>
Cleaning products .....	72
Application .....	72
Storage .....	72
Disposal .....	72
Emergency information .....	72
Hygiene regulations .....	73
Water .....	73
Coffee .....	73
Milk .....	73
Automatic machine powder/instant powder .....	74
Syrup .....	74
<b>Liability</b> .....	<b>75</b>
Operating company responsibilities .....	75
Warranty and liability claims .....	75

# Introduction

## Welcome

This coffee machine is part of the next generation of fully automatic coffee machines. Our company's core competence as well as decades of experience have flowed into designing this equipment.

These operating instructions provide information about the product, its operation and how to clean the coffee machine. If the coffee machine is not used according to the instructions, we shall not be held liable for any damages. However, these operating instructions cannot take every conceivable application into account. For further information, please contact our customer service.

The performance of the coffee machine depends on its proper operation and maintenance. Carefully read the operating instructions before commissioning the machine for the first time, and keep the instructions in an easily accessible place.

We hope you enjoy using your new coffee machine!

## Signs and symbols



See also *Safety notes*

The following signs and symbols are used in these operating instructions to point out sources of danger and specific points of importance:

**DANGER!**  
Risk of electrocution!



**An imminently dangerous situation that may result in death or serious injury from electric shock.**

The measures described for preventing this danger must be adhered to.

**CAUTION!**  
User at risk!



**A generally dangerous situation that may result in injury.**

The measures described for preventing this danger must be adhered to.

**CAUTION!**  
Risk of machine damage!



**A situation that may result in damage to the machine.**

The measures described for preventing this danger must be adhered to.

**CAUTION!**  
Hot fluid!



**A dangerous situation that may result in scalding injuries. This danger arises at the dispensing points. In this document, the danger is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.

**CAUTION!**  
Hot steam!



**A dangerous situation that may result in scalding injuries. This danger arises at the dispensing points. In this document, the danger is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.

**CAUTION!**  
Hot surface!



**A dangerous situation that may result in burn injuries. This danger arises at the dispensing points and cup warmer locations (option). In this document, the danger is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.

**CAUTION!**  
Risk of trapping fingers!



**A dangerous situation that may result in crushing injuries. In the information below, it is indicated purely by this symbol.**

The measures described for preventing this danger must be adhered to.

## General safety notes

Maximum safety is one of the most important features of Schaerer AG products. The effectiveness of the safety equipment can only be ensured if the chapter containing precautions to avoid injury and danger to health are adhered to.



The safety notes can be requested from Schaerer AG or downloaded directly from the Media-Centre on the website (<http://www.schaerer.com/member>).

### User at risk!

**CAUTION!**  
User at risk!



**Improper handling of the coffee machine can lead to minor injuries.**

**Please adhere to the following points:**

- Read the User Manual carefully before using the machine.
- The machine service area may only be accessed by a qualified service technician.
- Do not use the coffee machine if it is not working properly or is damaged.
- Under no circumstances may the installed safety devices be modified.
- Do not touch hot machine parts.
- This device can be used by children aged 8 and up and by persons with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge, provided they are supervised or have been instructed about the safe use of the device and understand the potential hazards resulting from said use. Children must not play with the device. Children must also not be allowed to perform cleaning procedures or user maintenance without supervision. This must only be done by persons who have the knowledge of and practical experience with the device, particularly when it comes to service and hygiene.
- The coffee machine must be installed in such a way that there is nothing to hinder care and maintenance.
- Whether the machine is used for self-service or full-service operation, it must be supervised by trained personnel to ensure that it is cared for correctly and that personnel are available to answer questions regarding its use.
- Only fill the bean hoppers with coffee beans, the powder containers with automatic machine powder and the manual inlet with ground coffee (or cleaning tablets during cleaning).

**DANGER!**  
Risk of electrocution!



**Improper handling of electrical equipment can result in electric shock.**

**Please adhere to the following points:**

- Work on electrical systems may only be performed by skilled electricians.
- The machine must be connected to a fused electrical circuit (we recommend routing the connection through a residual current circuit breaker).
- All relevant guidelines on low voltage and/or country-specific or local safety regulations and laws must be observed.
- The connection must be properly earthed and protected from electric shock.
- The voltage must match the specified values on the machine's serial plate.
- Never touch energised parts.
- Before carrying out service work, always switch off the main switch and/or disconnect the machine from the power supply system.
- The power cable must only be replaced by qualified service technicians.

**CAUTION!**  
User at risk!



**Beverages containing additives or traces of additives may trigger allergies.**

**Please adhere to the following points:**

- For self-service mode, a sign should be displayed in the vicinity of the machine to provide information about any additives used which could trigger an allergic reaction.
- For full-service mode, trained personnel should be on hand to provide information about any additives used which could trigger an allergic reaction.

**CAUTION!**  
User at risk!



**Danger of poisoning from ingesting cleaning products.  
Please adhere to the following points:**

- Store cleaning products away from children and unauthorised persons.
- Do not swallow the cleaning products.
- Never mix cleaning products with other chemicals or acids.
- Never pour cleaning products into the milk container.
- Never pour cleaning products into the drinking water tank (internal/external).
- Only use the cleaning and descaling products for their intended purpose (see label).
- Do not eat or drink while handling cleaning products.
- Ensure that the area is well ventilated when handling cleaning products.
- Wear safety gloves when handling cleaning products.
- Wash your hands thoroughly after handling cleaning products.



*Before using cleaning products, read the information on the packaging carefully. If not available, the HEALTH & SAFETY DATA SHEET can be obtained from the sales partner (see the cleaning product packaging).*

**CAUTION!**  
Hot fluid!



**There is a risk of scalding in the area where beverages, hot water and steam are dispensed.**

**Never reach under the dispensing points while the machine is dispensing or during cleaning.**

**CAUTION!**  
Hot surface!



**The dispensing points and the brewing unit may be hot.**

**Do not touch any part of the dispensing equipment except the grips provided for this purpose. Only clean the brewing unit after the coffee machine has cooled down.**

**CAUTION!**  
Risk of trapping fingers!



**When working with moving components, there is a risk of fingers or hands becoming trapped.**

**While the coffee machine is switched on, never reach into the bean or powder containers or into the opening of the brewing unit.**

**Risk of machine damage!**

**CAUTION!**  
Risk of machine  
damage!



**Improper handling of the coffee machine can lead to damage or contamination.**

**Please adhere to the following points:**

- For water with a carbonate hardness above 5 °dKH, install a limescale filter, as the coffee machine can otherwise be damaged by limescale deposits.
- At the end of the business day, always ensure that the stop valve of the water supply (coffee machine with mains water supply) is closed and the main power switch is switched off or the power cable is unplugged. This is for insurance reasons.
- Applicable low voltage guidelines and/or country-specific or local safety regulations and laws must be observed.
- Do not operate the machine if the water supply is blocked. Otherwise, the boilers will not be refilled and the pump will run dry.
- Schaefer AG recommends installing a water stop valve (manufacturer-side) in the water connection to prevent water damage in case of hose breakage.
- After extended downtime (e.g. company holiday), the coffee machine must be cleaned before it is put back into operation.
- Protect the coffee machine from weather elements (frost, moisture, etc.).
- Faults must only be remedied by a qualified service technician.
- Only use Schaefer AG original spare parts.
- Report any noticeable damage or leaks immediately to an authorised service partner and have any faulty parts replaced and/or repaired.
- Never spray the device with water or clean it with a steam cleaner.
- Do not install the machine on a surface where a water jet might be used.
- When using caramelised coffee (flavoured coffee), clean the brewing unit twice daily.
- Only fill the bean hoppers with coffee beans, the powder containers with automatic machine powder and the manual inlet with ground coffee (or cleaning tablets during cleaning).
- Never use instant coffee as it clogs the brewing unit.
- If the coffee machine and/or auxiliary equipment is transported at temperatures below 10°C, the coffee machine and/or auxiliary equipment must be stored at room temperature for three hours before connecting the coffee machine and/or auxiliary equipment to the power supply and switching them on. If these instructions are not followed, condensation may cause short circuits or damage electrical components.
- Always use the new hose set supplied with the machine (drinking water/waste water hose). Never use old hose sets.

## Product description

### Intended use

The Schaerer Coffee Art Plus Best Foam has been designed to dispense coffee beverages, hot water, powder-based beverages (toppings & chocolate) and milk beverages, optionally with syrup, in different versions and combinations in cups, mugs, glasses or pots. The steam wand is intended solely for warming up milk.

This device is intended for commercial use in hotels, restaurants and similar establishments. The device can be installed at self-service locations and operated without supervision. The device can be used in businesses, offices and other similar work environments, hotels, motels and bed and breakfast establishments and can be operated by non-experts and customers.

This device can be used by children aged 8 and up and by persons with limited physical, sensory or mental capabilities or a lack of experience and/or knowledge, provided they are supervised or have been instructed about the safe use of the device and understand the potential hazards resulting from said use. Children must not play with the device. Children must also not be allowed to perform cleaning procedures or user maintenance without supervision. This must only be done by persons who have the knowledge of and practical experience with the device, particularly when it comes to service and hygiene.



*Use of this equipment is subject to the "General Terms and Conditions" of Schaerer AG and these operating instructions. In legal terms, any other use is not an intended use. The manufacturer accepts no liability for damage resulting from unintended use.*

**CAUTION!**  
Risk of machine  
damage!



**Improper handling of the coffee machine can result in damage. Under no circumstances may the Schaerer Coffee Art Plus be used to heat or dispense any liquid other than the named or cooled milk (pasteurised, homogenised, UHT).**

### Beverage types and output

Depending on the machine variant and options, the following beverages can be prepared:

Beverage output per hour	
Espresso 50 - 60 ml	±250 cups
Coffee 120 ml	±250 cups

Available beverages:	
Ristretto	Espresso
Coffee	Americano
White americano	Latte
Cappuccino (Light, Classic, Fujiyama(light))	Latte macchiato
Espresso macchiato	Chociatto
Flat white	Hot chocolate
Spirited coffee	Coolmacc
Hot milk	Cold milk
Hot milk foam	Cold milk foam
Caffeine-free beverages	Mug
Flavoured coffee and milk beverages	Powder-based beverages
Steam	Hot water

## Models

The Schaerer Coffee Art Plus Best Foam™ is available in the following models:

- Schaerer Coffee Art Plus Best Foam™ with under-counter milk system
- Schaerer Coffee Art Plus Best Foam™ with Centre Milk
- Schaerer Coffee Art Plus Best Foam™ with powder system
- Schaerer Coffee Art Plus Best Foam™ with Flavour Point


## Scope of delivery and accessories

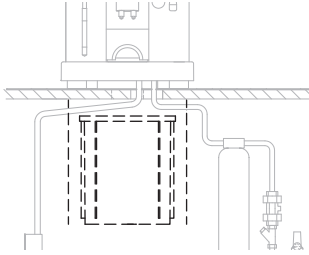





Quantity	Designation	Article number
Documentation		
1	Operating instructions	**
*	Cleaning instructions	**
*	Supplementary instructions for cup warmer + Cup & Cool	**
Smart card		
1	CHEF card	063930
1	SAVE DATA card	063933
Cleaning/Cleaning accessories		
1	Cleaning brush	067409
1	Set for daily cleaning	-
*	Cleaning container (8 litres) (milk system)	070743
General accessories		
*	Milk container (8 litres) (milk system)	070742
1	Measuring spoon	067111
1	Flat seal	064249
1	Drain hose	071770
*	Connection cable, CH standard	063260
*	Connection cable, EURO standard	063261
1	Grinder adjustment tool	070907
1 set	Milk suction nozzles (8 pcs)	071246
1	60 cm hose (transparent)	061108







\* \* Depending on machine version.





\*\* Language-specific article number.

## Options and optional accessories

Example	Option	Description
	Bean hopper	Optional bean hopper with coffee shop design Not lockable Machine height: 794 mm Capacity: 1000 g

Example	Option	Description
	<p>Under-counter grounds disposal</p>	<p>The grounds container and the bottom of the coffee machine have a cut-out that is continued through the counter. The coffee grounds are collected in a large container underneath the counter.</p>
	<p>Cup warmer</p>	<p>For preheating multiple cups of varying types. The cup heating can be regulated. Cup capacity: ca. 70 – 100</p>
	<p>Centre Milk</p>	<p>Milk system for two coffee machines Coolant: R134 a Coolant quantity: 40 g Centre Milk milk capacity: 8 l or 2 x 4 l</p>
	<p>Under-counter cooling unit for cold milk system</p>	<p>Under-counter cold milk system with integrated milk pump for the preparation of warm and hot milk and milk foam beverages. The milk temperature can be regulated. This option is well suited for use with large milk consumption and little counter space. The system can optionally supply two coffee machines at the same time or it can supply one machine with two milk types.</p>
	<p>Powder system</p>	<p>For the preparation of beverages with Choco powder. Available in the following versions: Choco and Twin Choco.</p>
	<p>Flavour Point</p>	<p>Integrated flavour system for the preparation of flavoured coffee and milk beverages. The side cooling unit offers space for up to four different varieties.</p>

Example	Option	Description
	Cup dispenser	<p>Cup dispenser for approx. 40 cups in two different sizes.</p> <p>Ø 60 - 90 mm</p>
	Coin changers	<p>Coin changer with MDB interface. Up to 2 coffee machines can be connected. Up to 99 different sales prices can be set.</p> <p>The coin changer can be switched off, and the unit can be switched to push-button operation.</p> <p>Accepts coins from 5 cents to 2 euros, CHF 0.10 – CHF 5.00 and two different tokens. The coin changer contains coin tubes for change.</p>
	Coin testers	<p>The coin tester allows the dispensing of coffee in the Self-service mode after the necessary coins or tokens have been inserted.</p> <p>The coin tester can be switched off, and the unit can be switched to push-button operation.</p> <p>Accepts coins from 5 cents to 2 euros, CHF 0.10 – CHF 5.00 and two different tokens. The coin tester does not return any change.</p>
	Powersteam	<p>Manual heating and foaming of milk.</p> <p>Ideal for the professional barista.</p>
	Autosteam	<p>Automatic heating of milk to a programmed temperature.</p> <p>Milk is foamed manually.</p>
	Steam cup warmer	<p>For pre-warming individual cups immediately before beverage dispensing.</p> <p><i>Only available in Switzerland.</i></p>

Example	Option	Description
	Swan neck	For dispensing coffee into pots.
	High feet	If needed, the coffee machine can be placed on high feet.
	Trolley	Together with a drinking water and a waste water tank, the trolley allows the coffee machine to become a mobile unit.
	External drinking and waste water	An external monitored drinking and waste water tank replaces a mains water supply and waste water outlet.



Please contact your local sales partner for more detailed information.

## Technical data

Nominal power*	Steam boiler	Hot water boiler
	2000 W/3000 W	2000 W/3000 W
Operating temperature		
Minimum operating temperature (T min.)	10 °C	10 °C
Maximum operating temperature (T max.)	192 °C	192 °C
Operating temperature	140 °C	95 °C
Overpressure		
Working overpressure	2.5 bar	2.5 bar
Permissible operating overpressure (p max.)	5 bar	12 bar
Test overpressure	24 bar	24 bar
Drinking water tank capacity	Mains water supply	

Nominal power*	Steam boiler	Hot water boiler
Bean hopper capacity	1000 g each ±	
Grounds container capacity	35 coffee cakes	
External dimensions		
Width	420 mm	
Height	538 mm	
Depth	668 mm	
Empty weight	±40 kg	
Permanent noise level**	<70 dB (A)	

Subject to technical changes.

- \* For special equipment, see serial plate. The values specified here apply to the standard equipment.
- \*\* The A-weighted noise level (slow) and Lpa (impulse) at the workplace of the operating personnel is below 70 dB (A) for every operating mode.

## Serial plate



**Designation** coffee machine  
**Manufacturer** Schaerer AG, Allmendweg 8  
 4528 Zuchwil, Switzerland  
**Typ** SCA P  
**Serial No.** 1137 308545  
**Nominal pressure** 1.2 MPa (12 bar)  
**main pressure** 0.1-0.3 MPa, max 0.6MPa  
**Electrical Ratings** 2000 – 2200W  
 200 - 220V 2~ 50/60Hz  
**Fuse on-site** 2x 15A (cable: 3x 1.5mm<sup>2</sup>)  
*Engineered and assembled in Switzerland*

Machine-specific data are listed on the serial plate. The serial plate is affixed to the inside of the machine and is visible when the coffee grounds container and the cover above it are removed.

- In the event of a fault or warranty claim, please provide the information on the serial plate.

## EC Declaration of Conformity

### Manufacturer's address

Manufacturer	Documentation specialist
Schaerer AG P.O.Box 336 Allmendweg 8 CH-4528 Zuchwil, Switzerland T +41 (0)32 681 62 00 F +41 (0)32 681 64 04 info@schaerer.com www.schaerer.com	Schaerer AG Hans-Ulrich Hostettler P.O. Box Allmendweg 8 CH-4528 Zuchwil, Switzerland

### Applied standards

The aforementioned manufacturer declares herewith that this machine complies with all relevant stipulations of the specified directives. In case of any modifications of the units that have not been approved by Schaerer, this declaration is rendered invalid. The following harmonised standards have been applied. For proper implementation of the requirements, a quality management system certified in 2008 by DEKRA Certification GmbH in accordance with SN EN ISO 9001 is applied.

The manufacturer assumes sole responsibility for issuing this declaration of conformity. The object of the declaration described above fulfils the requirements of directive 2011/65/EU of the European Parliament and Council from June 8, 2011 for limiting the use of certain hazardous substances in electric and electronic devices.

<b>For CE conformity</b>	
<b>Machinery Directive 2006/42/EC</b>	<b>EMC Directive 20014/30/EU</b>
<ul style="list-style-type: none"> <li>• EN 60335-1: 2012</li> <li>• EN 60335-2-75: 2004</li> <li>• EN 62233: 2008</li> </ul>	<ul style="list-style-type: none"> <li>• EN 55014-1: 2006</li> <li>• EN 55014-2: 1997</li> <li>• EN 61000-3-2: 2014</li> <li>• EN 61000-3-3: 2013</li> </ul>
RoHS Directive 2011/65/EU	

<b>For compliance with European ordinances</b>
<ul style="list-style-type: none"> <li>• Ordinance (EU) no. 10/2011</li> <li>• Ordinance (EC) no. 1935/2004</li> <li>• Ordinance (EC) no. 2023/2006</li> <li>• WEEE 2012/19/EC</li> </ul>

<b>International (CB)</b>	
<b>Safety</b> <ul style="list-style-type: none"> <li>• IEC 60335-1: 2006</li> <li>• IEC 60335-2-75: 2009</li> </ul>	<b>EMC</b> <ul style="list-style-type: none"> <li>• CISPR 14-1: 2009</li> <li>• CISPR 14-2: 2008</li> <li>• IEC 61000-3-2: 2001</li> <li>• IEC 61000-3-3: 2008</li> </ul>

# Installation and commissioning

## Setting up machine

### Location

**CAUTION!**  
Risk of machine  
damage!



The location where the coffee machine is set up must meet the conditions specified below. The coffee machine may be damaged if these conditions are not met. It is essential to observe the following conditions:

- The installation surface must be stable, horizontal and level so that it does not become deformed under the weight of the coffee machine.
- Do not erect on hot surfaces or close to heat sources.
- Set up the coffee machine in such a way that it can be monitored by trained personnel at all times.
- The required supply terminals must be within 1 m of the machine location according to the manufacturer-side installation plans.
- Maintain the following clearances for maintenance work and operation:
  - Allow enough space above the machine to refill coffee beans.
  - Leave min. 5 cm clearance from the rear side of the machine to the wall (air circulation).
- Comply with all applicable local regulations for kitchen equipment.

### Ambient conditions

**CAUTION!**  
Risk of machine  
damage!



The location where the coffee machine is installed must satisfy the ambient conditions specified below. The coffee machine may be damaged if these conditions are not met. It is essential to observe the following conditions:

- Ambient temperature of +10 °C to +40 °C (50 °F to 104 °F)
- Relative humidity of max. 80% RH
- This coffee machine is designed for indoor use only. Do not use in the open and never expose to the weather (rain, snow, subzero temperatures).

If the coffee machine was exposed to subzero temperatures:

- ▶ Contact customer service before commissioning.

## Power supply

### Conditions

The equipment must be connected in accordance with the regulations of the country in which it is installed. The voltage specified on the serial plate must match the mains voltage at the installation location.

**DANGER!**  
Risk of electrocution!



### Risk of electrocution!

Please adhere to the following points:

- The phase must be fused at the ampere value specified on the serial plate!
- It must be possible to disconnect the device from the mains power supply at all poles.
- The electrical system at the installation site must conform to IEC 364 (DIN VDE 0100). To increase safety, the device should be connected to a ground fault circuit interrupter with 30 mA nominal error current (EN 61008). (Type B residual current circuit breakers ensure response even in the event of smooth DC residual currents. This results in a high level of safety.)
- Never operate a device with a damaged power cable. Have a defective power cable or plug replaced immediately by a qualified service technician.
- Schaefer AG does not recommend using an extension cord. If an extension cord is used despite this (minimum cross-section: 1.5 mm<sup>2</sup>), please comply with the manufacturer's specifications for the cable (operating instructions) and with locally applicable regulations.
- Route the power cable in such a way that it does not pose a tripping hazard. Do not pull the cable over corners or sharp edges, pinch it between objects or allow it to hang loosely in open spaces. Do not position the cable over hot objects, and protect the cable from exposure to oil and aggressive cleaning products.
- Never lift or pull the device by the power cable. Never pull the power cable out of the socket by its cable. Never touch the power cable or plug with wet hands. Never insert a wet plug into a power socket.

### Connection values

Mains				Fuse protection (building side)	Connecting cable, conductor cross-section
1L, N, PE	220 – 240 V~	50/60 Hz	2000 - 2400 W	10 A	3 x 1 mm <sup>2</sup>
			3000 - 3600 W	16 A	3 x 1.5 mm <sup>2</sup>
			5700 - 6900 W	30 A	3 x 4 mm <sup>2</sup>
3L, N, PE	380 – 415 V 3N~	50/60 Hz	5700 - 6900 W	3 x 16 A	5 x 1.5 mm <sup>2</sup>
			8300 - 10100 W	3 x 16 A	5 x 1.5 mm <sup>2</sup>
2L, PE	200 – 220 V 2~	50/60 Hz	2000 - 2200 W	2 x 15 A	3 x 1.5 mm <sup>2</sup>
			2600 - 3200 W	2 x 15 A	3 x 1.5 mm <sup>2</sup>
			4700 - 5800 W	30 A	3 x 10 AWG
			4700 - 5900 W	2 x 30 A	3 x 10 AWG
			4700 - 5900 W	2 x 25 A	3 x 2.5 mm <sup>2</sup>
3L, PE	200 V 3~	50/60 Hz	7000 W	3 x 20 A	4 x 2.5 mm <sup>2</sup>
3L, PE	200 V 3~	50/60 Hz	6900 - 8500 W	3 x 25 A	4 x 2.5 mm <sup>2</sup>
			7700 W	25 A	4 x 2.5 mm <sup>2</sup>

## Water connection/drain

### Conditions

**CAUTION!**  
Risk of machine  
damage!



The machine can suffer damage due to bad material and incorrect water values. It is imperative that the following points are complied with:

- The water must be free of contaminants and the chlorine content must not exceed 50 mg per litre.
- Do not connect the machine to pure reverse osmosis water or other aggressive types of water.
- The carbonate hardness must not exceed 5 – 6 °dKH (German carbonate hardness) or 8.9 – 10.7 °fKH (French carbonate hardness), and the total hardness value must always be greater than the carbonate hardness.
- The minimum carbonate hardness is 5 °dKH or 8.9 °fKH. The pH value must be between 6.5 – 7.
- Always use the new hose set (fresh water/waste water hose) supplied with the machine.

The machine must be connected to the water supply in accordance with applicable requirements and the regulations of the respective country. If the machine is connected to a newly installed water pipe, the pipe and intake line must be rinsed thoroughly to ensure that no dirt gets into the machine.

The coffee machine must be connected to an installed drinking water line with a shut-off valve. Installation takes place via the installed pressure hose and the G 3/8" screw connection onto the pressure reducing valve that is mounted on the water tap (set to 0.3 MPa (3 bar)).

If the machine is connected to a drain, the included temperature-resistant drain hose must be connected to the drip tray and the siphon. This hose must be firmly attached to the drain and slanted at a downward angle (so that the water is able to drain).



The "Water quality" supplementary instructions include information on recording the water values and using filter equipment. The supplementary instructions can be requested from Schaefer AG or downloaded directly from the MediaCentre on the website (<http://www.schaerer.com/member>).

### Connection values

Water pressure	Recommended:	0.1 – 0.6 MPa (1 – 6 bar)
	Maximum:	0.6 MPa (6 bar)

Water inlet temperature	Minimum:	10 °C
	Maximum:	30 °C

## Installation



Read the "Setting up the coffee machine" and "Power supply" chapters carefully before installing.

- ▶ Unpack the machine.
- ▶ Check the remaining package contents for accessories.
- ▶ Supplied accessories from grounds container.
- ▶ Keep the original packaging in case the equipment needs to be returned.

## Disassembly and disposal



The coffee machine must be disposed of correctly in conformity with local and legal regulations.

- ▶ Contact your service partner.

## Operation

**CAUTION!**  
Risk of machine  
damage!



**Incorrect use may damage the touch screen.**  
**Never use force, strong pressure or sharp objects when pressing on the display.**

### Check before switching on

- ▶ Before switching on the coffee machine, check whether the following conditions are fulfilled.

Conditions for switching on the coffee machine:

- The stop valve of the water supply (in machines with a mains water supply) is open/the drinking water tank is filled with fresh water.
- The waste water outlet has been correctly laid/the waste water tank is connected.
- The bean hopper(s) is/are filled and the locking mechanism is open.
- The grounds container is empty and inserted correctly.
- The coffee machine is connected to the mains power supply.

### Switching on


#### Starting the PC board

Starting up the PC board takes approx. 1 minute. Nothing is displayed on the Touch Screen during this phase. Once the PC board has been started, the machine is in standby mode and can be switched on.

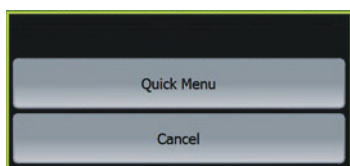


*After a long period of out of operation, the machine must be cleaned after it has been switched on.*

#### Standby quick menu

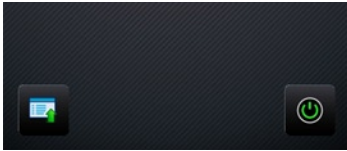
In standby mode, the standby Quick Menu can be called up by pressing the  field. The following submenus can be called up in the Quick Menu:


- Setting clock
- Set date
- Set time zone
- Error and cleaning statistics
- Activate brewing time: Display of the brewing time after beverage dispensing
- Information
  - Machine number (factory setting)
  - Customer number (factory setting)
  - Display SCA software version (factory setting)
  - Display SCA TouchIT software version (factory setting)
  - External keys



*See chapter "Programming" - "Timer" See chapter "Programming" - "Counters and statistics" - "Error and cleaning statistics".*

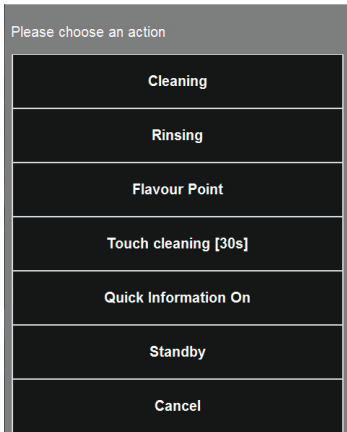
### Switching on coffee machine (touch screen)



- ▶ Switch on the machine using the [  ] field.
  - ☑ The machine starts and warms up (see information in Quick Info at top right).

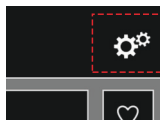
### Service menu

The machine must be switched on. The following submenus and functions are contained in the "Service" menu:



- [Cleaning] starts a cleaning programme. A PIN entry prompt can be set for "Self-service" mode. This is configured in the "Self-service settings" parameter.
- [Rinsing] starts a machine rinse.
- [Flavour Point]
  - [Exchange Flavour Point bottle] starts the routine for exchanging a flavour bottle.
  - [Clean flavour system] starts the Flavour Point cleaning process.
- [Touch screen cleaning] deactivates the touch screen for 30 sec.
- [Quick information On] displays the "Quick information" window in the top right corner of the touch screen.
- [Standby] switches the machine into standby. Only in "Self-service mode"
- [Cancel] closes the "Service" menu again.

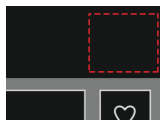
#### Option: [Service] field visible



"Service button visible" parameter activated in [TouchIT configuration].

- ▶ Press the [Service] field at the top right.
  - ☑ The "Service" menu opens.

#### Option: [Service] field hidden



"Service button visible" parameter deactivated in [TouchIT configuration].

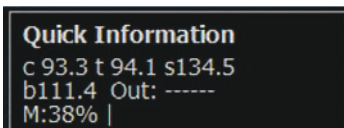
- ▶ Press and hold the top right corner of the touch screen for ±2 sec.
  - ☑ The "Service" menu opens.

### Quickinfo



- ▶ Press the [Service] field at the top right.
  - ☑ The "Service" menu opens.
- ▶ Select the [Quick information on] field.
  - ☑ The Quick information appears at the top of the touch screen.
- ▶ Pressing and holding the Quick information window, move it into the required location.

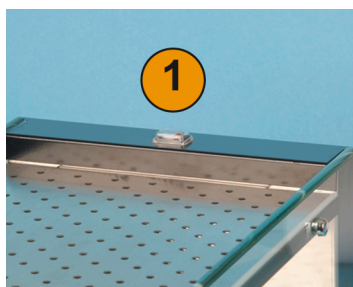
Quick information provides information on the following temperatures:



- (c) shows the coffee boiler temperature.
- (t) shows the tea boiler temperature (option).
- (s) shows the steam boiler temperature (option).
- (b) shows the booster temperature.

## Optional accessories

### Option 1: Cup warmer



- ▶ Switch on the cup warmer unit via the main switch (1).
  - The press switch lights up.

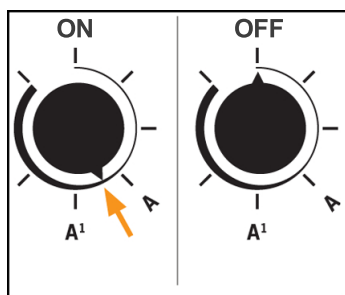
### Option 2: Cooling unit for the cold milk system



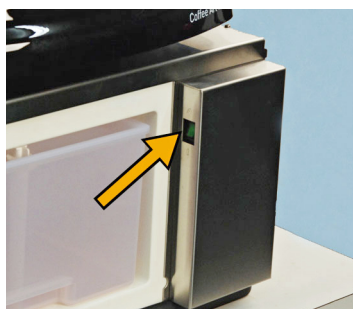
*The refrigerator model FG12 is suitable for an ambient temperature of max. 43 °C. This corresponds to climate class T or 5.*



*Do not store explosive substances such as aerosol containers with flammable propellant gas in this device.*



- ▶ Remove the cooling unit cover.
- ▶ Set the temperature switch of the cooling unit, see arrow.
- ▶ Mount the cooling unit cover again.
  - The cooling unit is switched on.



### Option 3: Under-machine cooling unit

- ▶ Open the door of the under-machine cooling unit.
- ▶ Switch on the press switch, see arrow.
  - The cooling unit is switched on.
  - The cooling temperature is preset at the factory.
- ▶ Close the door.

## Main touch screen window

Three user interfaces can be selected in the "Configuration" - "Screen layout" - "Screen design" menu:

- [Barista Silver] (standard)
- [Self-service]
- [Operator]



*The machine must be operated with the "Barista Silver" interface so that the Best Foam™ machine functions optimally and all operating options are available. The other screen designs are described below in this operating manual. Should one of the old screen designs be used, however, the Standard SCAP operating manual must be consulted.*



*See also "Configuration" – "TouchIT configuration" – "View set-up".*

## [Barista Silver] standard



max. 4 groups with max. 9 beverages can be configured in [Barista Silver] mode. Max. 12 beverages are possible without pre-selection and beverage groups.

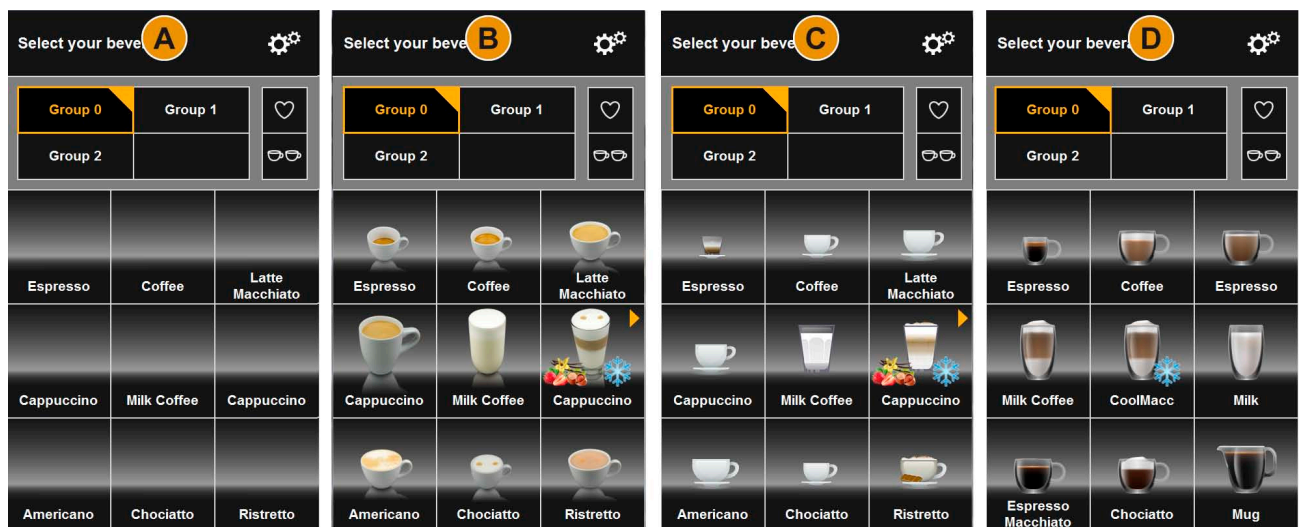
- ▶ Select [Barista Silver] in the "Configuration" - "Screen layout" - "Screen design" menu.

### Option 1: Design variants

- ▶ Select the beverage symbol in the "Configuration" - "TouchIT configuration" - "Beverage button symbol" menu.

Different symbol sets for beverage buttons:

- (A) With [Text only] selection
- (B) With [Set 1] selection
- (C) With [Set 2] selection
- (D) With [Set 3] selection



### Option 2: Selection varieties

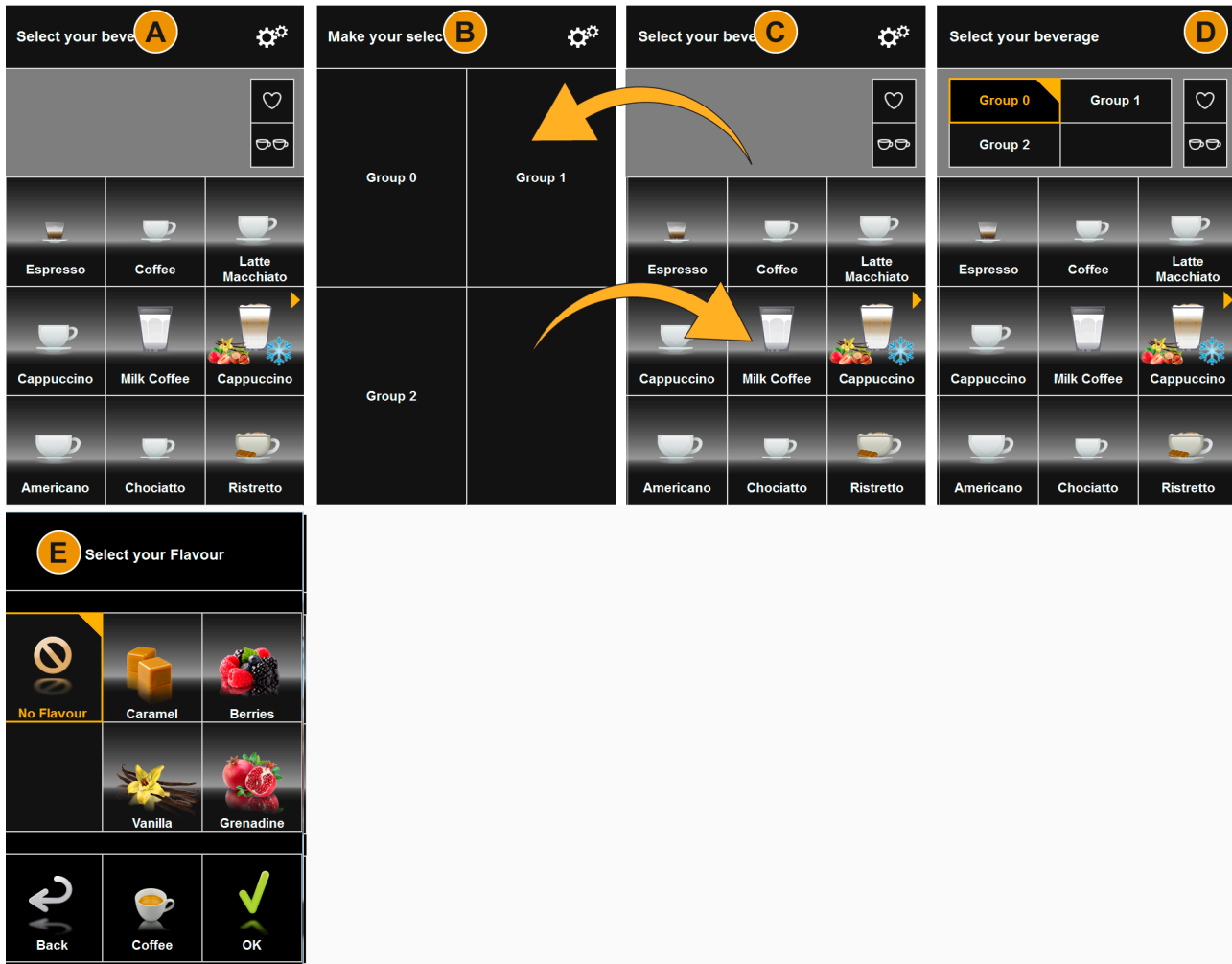


See also "Basic operation" - "Beverage selection with groups".

- ▶ Select the desired variant from the list in the "Configuration" - "Screen layout" - "Group selection" menu.

Selection list with groups:

- (A) [None (all beverages on one page)]
- (B) [Options before beverage selection] selection
- (C) [Options after beverage selection] selection
- (D) [Beverage groups] selection
- (E) Flavour selection, if configured



**Option 3: Self-service**

In order to operate the machine with the "Barista Silver" design in Self-service mode, only the beverage preselection must be deactivated.










*The pre-selection must be deactivated under "Configuration - General parameters - General pre-select". Access only possible with the SERVICE card.*


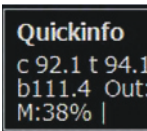

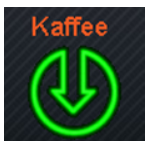
Selection page without pre-selection and beverage groups:



### Control fields

The following elements in the main window depend on the machine state:

Symbol	Description
<p>Groups</p> 	<p>In "Barista Silver", there are max. 4 groups that can be selected. Each group can hold max. 9 beverages.</p> <p>Selecting a beverage group shows the corresponding beverage page with the beverages stored there.</p> <p><i>The beverage groups can be configured in the "Configuration" menu in the "Beverage settings" submenu.</i></p> <p><i>See also "Programming" - "Beverage selection with groups".</i></p>
<p>Beverage field</p> 	<p>Each beverage field can be used to store and program the desired beverage.</p> <p>The display of the beverage fields can be selected under [Beverage button symbols] in the [Configuration] menu.</p> <p>The respective beverage is dispensed by pressing a beverage field.</p> <p><i>The beverages can be configured in the "Configuration" menu in the "Beverage settings" submenu.</i></p> <p><i>When using the "Barista Silver", the beverage file contains the information that the beverage contains a flavour or that a flavour can be selected for it.</i></p>
<p>DECAF</p> 	<p>To be able to dispense decaffeinated beverages (DECAF), two grinders are needed, one of which is filled with decaffeinated beans. Another possibility is to manually add decaffeinated ground coffee.</p> <p>The [DECAF] field is used to define the beverage configuration with decaffeinated coffee.</p> <p><i>The [DECAF] field can be activated in the [View set-up] submenu of the "Configuration" menu.</i></p>
<p>Double</p> 	<p>The [2x] field is used to dispense a double beverage. The beverage selected after pressing this field is dispensed with double the usual quantity.</p> <p><i>The [2x] field can be activated in the "Screen layout" submenu of the "Configuration" menu and is available with the "Operator" and "Barista Silver" design.</i></p> <p><i>In "Barista Silver", the [2x] field is available alternately with the "Barista" field.</i></p>
<p>Barista field</p> 	<p>The Barista field can be used to adjust the strength of the dispensed beverage for one brewing. After beverage dispensing, the Barista field returns to the standard setting of "medium". If no beverage is selected, the preselection is reset after 5 sec. See figure to the left.</p> <p>Selecting the Barista field toggles between the 3 coffee strengths [black, medium and strong].</p> <p><i>In "Barista Silver", the [Barista] field is available alternately with the "2x" field.</i></p>
<p>Service</p> 	<p>This field opens the "Quick Menu" in standby mode or the "Service" menu when the machine is switched on.</p> <p><i>See "Basic operation" - "Switching on" - "Quick Menu in standby mode" for further information.</i></p> <p><i>The [Service] field is located in the top right corner in the display.</i></p>
<p>Stop</p> 	<p>The [Stop] field is only displayed while a beverage is being dispensed. The beverage currently being dispensed and any other previously selected beverages can be cancelled using this field.</p>

Symbol	Description
Back 	The [Back] field returns the user to the previous page and is located in the top right corner in the display.
Info 	The [Quick Information] field at the top right is activated in the [Service] field of the Quick Menu. The Quick Information provides information on the current boiler temperatures. <i>See "Basic operation"- "Switching on" - "Quick Information" for further information.</i>
ON / OFF 	The [ON] field at the bottom right is used to switch the machine from stand-by into the operating mode.
Dispensing information 	The flashing symbol at the bottom of the touch screen appears while a beverage is being dispensed.

## Beverage selection with groups



*Settings can only be changed by a service technician.*



*The additional [DECAF], [Barista] and [Double products (2x)] functions can be set in the "Configuration" menu in the "Screen layout" submenu.*



*If not pre-selection option has been selected, 12 beverages can be displayed for each group. (Not possible when [Beverage groups] is selected)*

The following beverage selection variants are listed in the [Group selection] selection list:

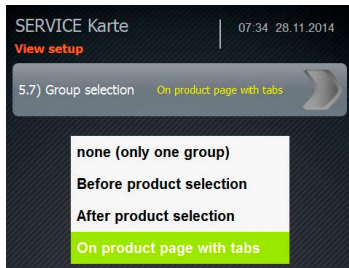
- [None (all beverages on one page)]
- [Options before beverage selection]
- [Options after beverage selection]
- [Beverage groups]

### Beverage groups

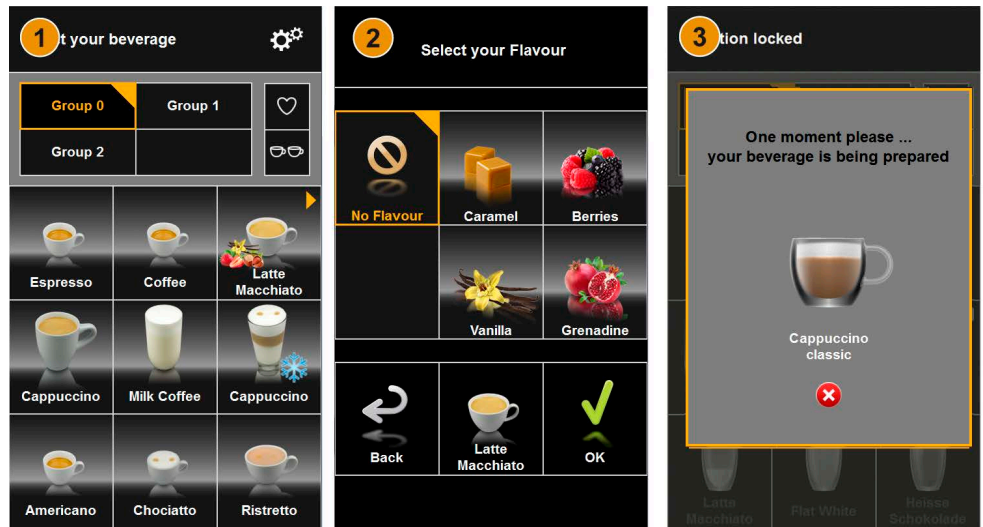
The [Beverage page and groups] selection is only available in [Barista Silver mode].



*The additional [DECAF] and [Double beverage (2x)] functions can be set in the "Configuration" menu in the "Screen layout" submenu in accordance with the selected operating mode.*



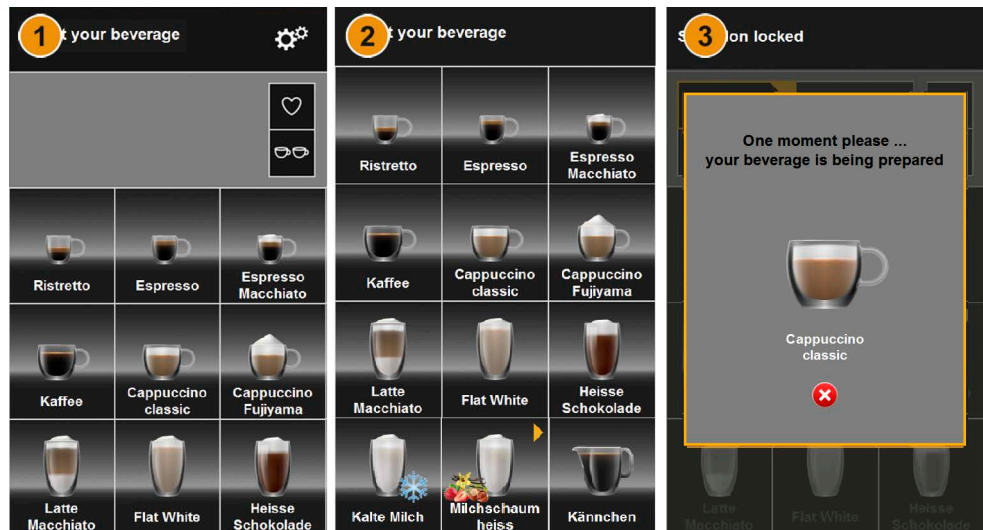
- 1) Selection of group and from the beverages stored in the group.
- 2) Optional when with flavour [Selection]
- 3) Beverage dispensing



- ▶ Configure all beverages in the "Beverage configuration".
- ▶ Select from the [Beverages with groups] selection list in the "Screen layout" menu.
  - Beverages are selected via a displayed beverage page with max. 9 beverages.

### None (all beverages on one page)

- 1) Selection from beverage page
- 2) Selection from product page without pre-selection options
- 3) Beverage dispensing



- ▶ Configure all beverages in the "Beverage configuration".
- ▶ From the selection list, select [none (all beverages on one page)] in the "Screen layout" menu.
  - Select the beverage on the beverage page displayed with up to 12 beverages.

### Options before/after beverage selection

Before beverages are configured for group selection, we recommend defining the following requirements:

- The function of the groups (e.g. SMALL – MEDIUM – LARGE).
- The number of beverage fields which are to be displayed per group.
- The total number of beverages should be taken into consideration.
- ▶ Select the [Screen Layout] submenu in the "Configuration" menu.

- ▶ Select [Barista Silver] in the "Screen design" parameter.
- ▶ Select [Options before beverage selection] or [Options after beverage selection] in the "Group selection" parameter.
- ▶ Set the required number of beverages to be displayed in the "Number of beverages per group" parameter.
  - 1 - 9 beverages
  - 1 - 12 beverages when without the [DECAF], [2x], [Barista] pre-selection options
- ▶ Enter the name in the "Group name" parameter.
- ▶ Store an image from the selection list in the "Group button picture" parameter as needed.
- ▶ Perform a "restart" by removing the SERVICE card.
- ▶ After the restart, reselect the "Configuration" menu with the SERVICE card.
- ▶ Open the "Beverage configuration" submenu.
- ▶ Define the beverages in the respective beverage groups.



See also "Configuration" - "Beverage configuration".

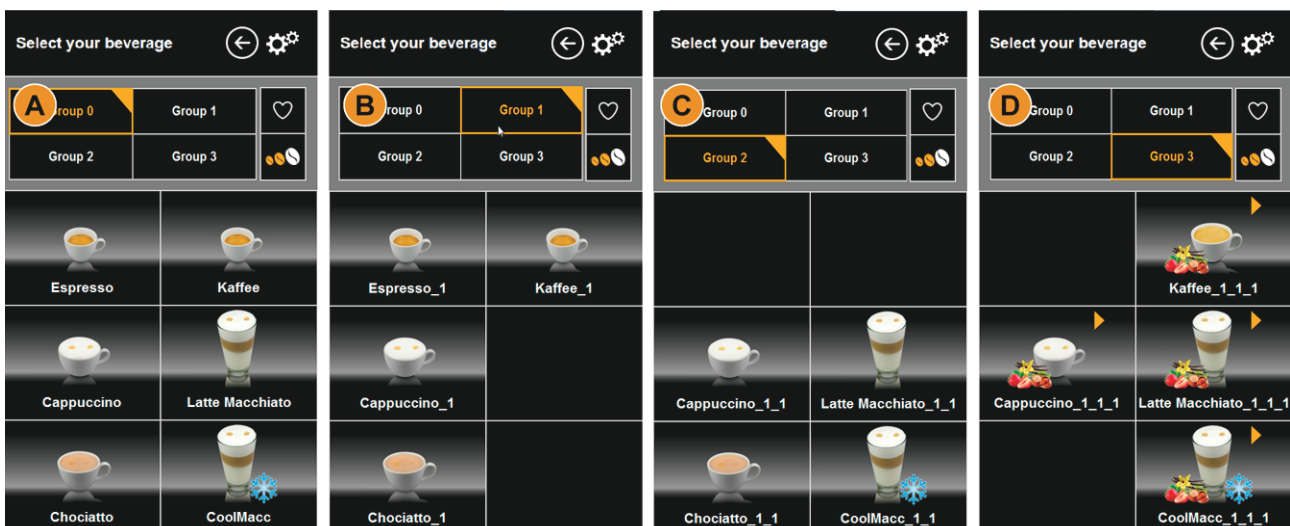


Configuration of the 1st group (A) should contain all available basic beverages, if possible.

Configuration example, 4 groups with 6 beverages per group:

Group A [Small]	Group B [Medium]	Group C [Large]	Group D [+Flavour]
Espresso	Espresso-1	–	–
Coffee	Coffee-1	–	Coffee 1.1.1
Cappuccino	Cappuccino-1	Cappuccino-1.1	Cappuccino 1.1.1
Latte macchiato	–	Latte macchiato-1.1	Latte macchiato- 1.1.1
Chocciato	Chocciato-1	Chocciato-1.1	–
CoolMacc	–	CoolMacc-1.1	CoolMacc- 1.1.1

- This configuration example enables beverage selection which works in two directions (Group > Beverage or Beverage > Group).



### Option 1: Options before beverage selection

The beverage is now selected from the 4 defined groups:

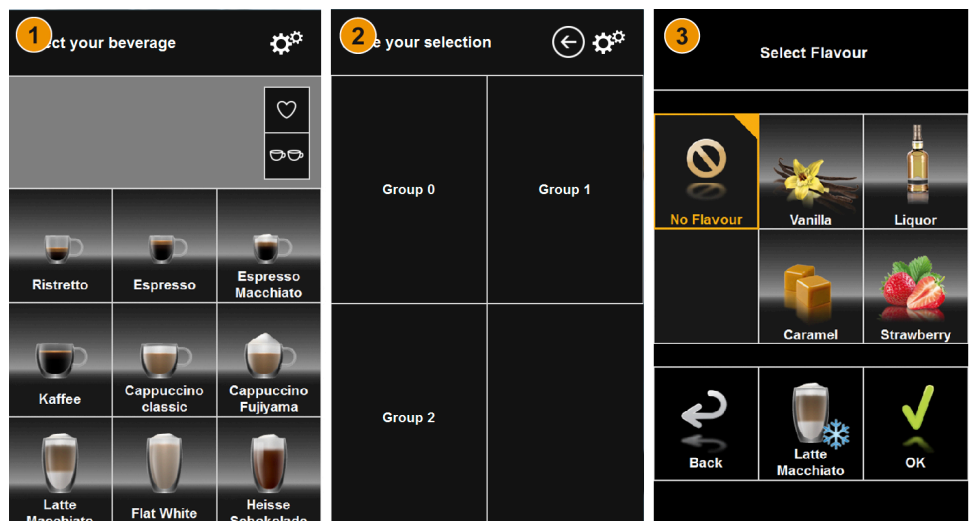
- Selection (1) from the beverage groups, e.g. Small - Medium - Large + Flavour.
- Selection (2) from beverage page.
- Selection (3) from flavour types.



**Option 2: Options after beverage selection**

Beverages are selected via the beverage page - in the next step, the group is selected (e.g. small - medium - large + flavour)

- 1) Selection from beverage page
- 2) Group selection
- 3) Optional when with flavour [Selection]



- ▶ Configure all beverages in the "Beverage configuration".
- ▶ Select from the [Options after beverage selection] selection list in the "Screen layout" menu.
  - The beverage is selected from a displayed beverage page.

**Self-service**

In order to operate the machine with the "Barista Silver" design in Self-service mode, only the beverage preselection must be deactivated.



*The pre-selection must be deactivated under "Configuration - General parameters - General pre-select". Access only possible with the SERVICE card.*

## Filling and connecting

### Coffee beans

**CAUTION!**  
User at risk!



Rotating grinding gauges in the grinder are an injury hazard.  
Never reach into the bean hoppers while the coffee machine is switched on.

**CAUTION!**  
Risk of machine damage!



Filling the bean hopper with foreign objects can cause jamming or destruction of the grinder.  
Never fill the bean hopper with anything other than coffee beans.



- ▶ Unlock bean hopper cover and unlatch using knob.
- ▶ Fill with coffee beans (max. 1,000 g).
- ▶ Replace cover. Twist knob to latch and use key to lock.

### Water

#### Option 1: Mains water supply

**CAUTION!**  
Risk of machine damage!



The machine can suffer damage if the pump runs dry.  
Before switching on the machine, make sure that the stop valve of the water supply is open.

- ▶ Open the stop valve on the main water valve.



*For reasons relating to insurance law, it is advisable that the stop valve of the water supply be closed at the end of the day.*

#### Option 2: Mains water supply

- ▶ Remove the cover on the drinking water tank.
- ▶ Remove the drinking water tank daily and rinse out thoroughly with fresh water.
- ▶ Fill the drinking water tank with fresh drinking water before using it.
- ▶ Reinsert the drinking water tank.
- ▶ Reattach the cover.

### Milk

#### Option: Side cooling unit

- ▶ Open the door.
- ▶ Remove and rinse the milk container.
- ▶ Pour in fresh, pre-cooled milk (3 – 5°C).
- ▶ Place the milk container into the cooling unit.
- ▶ Hang the hose or hoses into the container.
  - The hose end must be in contact with the container floor.
- ▶ Close the door.


#### Option: Under-counter milk

- ▶ Open the door.
- ▶ Remove and rinse the milk container.
- ▶ Pour in fresh, pre-cooled milk (3 – 5°C).

- ▶ Place the milk container into the cooling unit.
- ▶ Hang the hose into the container.
  - The hose end must be in contact with the container floor.
- ▶ Close the door.

### Coffee machine powder

**CAUTION!**  
Risk of machine damage!



Improper use can damage the machine.  
Never fill substances other than coffee machine powder into the powder container. The powder containers must be filled with no more than 500 g (Twin container) or 1,000 g (Standard container) of coffee machine powder.

**CAUTION!**  
User at risk!



Moving parts in the powder container are an injury hazard.  
Never reach into the powder container(s) while the unit is switched on.

#### Option 1: Choco

- ▶ Pour in the desired choco powder.


#### Option 2: Twin Choco

The powder container for Twin Choco is divided in the centre and has two compartments for two different types of choco powder.

- ▶ Pour the desired choco powder into compartments 1 and 2.

### Flavour Point (option)

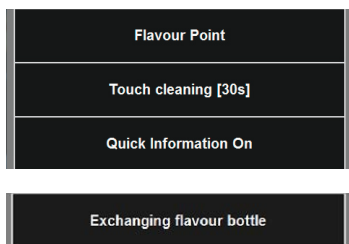
**CAUTION!**  
Risk of machine damage!




Improper use can damage the machine.  
Never use the Flavour Point to dispense anything other than syrup or spirits.



To prevent a full bottle from overflowing, the hose must first be inserted into the bottle and then connected to the Flavour Point.



- ▶ Press the [  ] field.
  - The "Service" menu opens.
- ▶ Select the [Flavour Point] field.
  - The Flavour Point submenu is displayed.
- ▶ Select the [Flavour Point bottle exchange] field.
  - The exchange routine starts.
- ▶ Follow the instructions on the display.

## Dispensing


**CAUTION!**  
Hot fluid!



All beverages dispensed from the machine are hot.  
Never reach beneath the beverage outlet or into the machine when beverages are being dispensed.

### Adjusting outlet height

**CAUTION!**  
Hot surface!



Hot surfaces can cause burns.  
Do not touch the beverage outlet during operation.

**CAUTION!**  
Risk of trapping  
fingers!



There is a risk of trapping fingers when adjusting the automatic and manual beverage outlet.  
When adjusting, make sure your hands are in a protected position.



*The outlet height can only be set by a service technician.*



After the beverage button is pressed, the automatic beverage outlet moves to a predefined position.

- ▶ Place a cup under the automatic beverage outlet.
- ▶ Press beverage button.
  - ☑ Automatic beverage outlet moves into position.
  - ☑ Beverage is dispensed.
  - ☑ Automatic beverage outlet returns to initial position.
- ▶ Once this is complete, remove the cup.

### Coffee beverages

**CAUTION!**  
Hot fluid!



- ▶ Place a cup under the beverage outlet.
- ▶ Press the desired beverage button.
  - ☑ The beverage button flashes while the machine is dispensing the beverage.
  - ☑ The beverage name and the dispensing progress are shown in the display.
- ▶ Remove the cup after the beverage has been dispensed.

### Beverages with ground coffee



*The manual inlet/ground coffee is located between the bean hoppers.*

**CAUTION!**  
Risk of machine  
damage!



**Incorrect use may damage the machine.**  
Never fill instant coffee into the manual inlet. Only fill with ground coffee or cleaning tablets.



#### Option 1: With manual inlet monitoring

- ▶ Place a cup under the beverage outlet.
- ▶ Open the inlet for ground coffee.
  - ☑ "DECAF inlet open" is displayed in the status bar.
  - ☑ The remaining available beverages are shown on the display.
- ▶ Press the desired beverage button.
  - ☑ "Add decaffeinated coffee powder" appears in the display.
- ▶ Add the ground coffee within 15 seconds.
- ▶ Close the inlet for ground coffee.
  - ☑ The beverage is dispensed.
- ▶ Remove the cup after the beverage has been dispensed.

#### Option 2: Without manual inlet monitoring

- ▶ Place a cup under the beverage outlet.
- ▶ Press the DECAF field.
  - ☑ The remaining available beverages are shown on the display.
- ▶ Press the desired beverage button.
  - ☑ "Add decaffeinated ground coffee" appears in the display.
- ▶ Open manual inlet for ground coffee.
- ▶ Add ground coffee within 15 seconds.
- ▶ Close manual inlet for ground coffee.



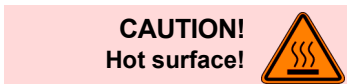
- The beverage is dispensed.
- ▶ Remove the cup after the beverage has been dispensed.

### Hot water



Dispensing of hot water can be preset as follows using the SERVICE card:

- [Hot water] button with the "Start-stop" function.
- [Hot water] button with the "Press and hold" function.
- [Hot water] button with the "Double beverage" function.
- ▶ Place a cup under the hot water outlet.
- ▶ Press the [Hot water] button or press it and keep it held down.
- ▶ Remove the cup after the beverage has been dispensed.



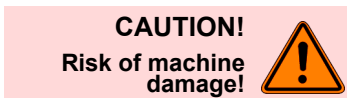
**There is a risk of burns at the hot water outlet during hot water dispensing. Do not touch the hot water outlet.**

### Milk beverages



- ▶ Place a cup under the beverage outlet.
- ▶ Press the desired beverage button.
- ▶ Remove the cup after the beverage has been dispensed.

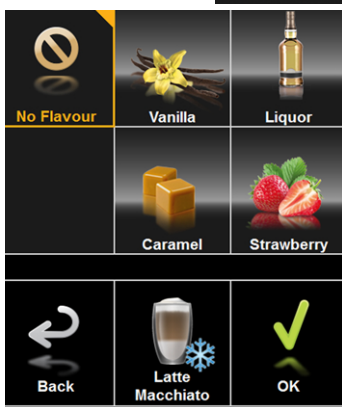
### Flavoured beverages



**Improper use can damage the machine. Never use the Flavour Point to dispense anything other than syrup or spirits.**



- Option 1: Select aroma**
- ▶ Place a cup against the cup stop under the beverage outlet.
  - ▶ Press the desired beverage button.
    - The selection screen is displayed.
  - ▶ Select an aroma.
  - ▶ Select Regular or Decaf coffee.
  - ▶ Press the [Make my beverage!] field.
    - The selected combination is dispensed.
    - The beverage overview is once again displayed.
  - ▶ Remove the cup after the beverage has been dispensed.



- Option 2: Predefined beverages**
- ▶ Place a cup against the cup stop under the beverage outlet.
  - ▶ Press the desired beverage button.
  - ▶ Remove the cup after the beverage has been dispensed.

**CAUTION!**  
Hot steam!



## Steam

- ▶ Place the cup/container beneath the steam wand.
  - ☑ The tip of the steam wand must be completely under the surface of the milk.
- ▶ Press the [Steam] button.
- ▶ After steam dispensing is finished, remove the cup/container.
- ▶ Clean the outside of the steam wand with a moist paper towel.
- ▶ Point steam wand at drip grid and briefly press the [Steam] button.
  - ☑ Milk and beverage residues are flushed out of the steam wand.

### Option 1: Powersteam

- ▶ Aerate the milk by injecting steam beneath the surface.
  - ☑ The milk is heated from 5 °C to 37 °C.
- ▶ Dense milk foam is created by injecting steam on the bottom third of the milk height, rolling and turning clockwise.
  - ☑ The milk is heated from 37 °C to 65 °C.

### Option 2: Autosteam

- ▶ Aerate the milk by injecting steam beneath the surface.
  - ☑ The milk is heated from to the set temperature.
  - ☑ When the set temperature is reached, Autosteam switches off.
- ▶ Dense milk foam is created by injecting steam on the bottom third of the milk height, rolling and turning clockwise.
  - ☑ The milk is heated from 37 °C to 65 °C.

## Dispensing options

### Stopping continuous dispensing



*If the wrong beverage has been selected, it is possible to stop the dispensing process.*

#### Option 1: Stopping continuous dispensing

- ▶ Press the [X] button.
  - ☑ Continuous dispensing is stopped.

#### Option 2: Deleting beverages in the pre-selection

- ▶ Press the [X] button.
  - ☑ The pre-selected beverages are deleted.
  - ☑ The current beverage is fully dispensed.

### Pre-selecting beverages



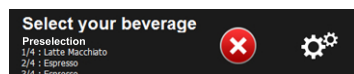
*If configured, multiple different beverages can be selected and dispensed consecutively. The coffee machine dispenses the beverages in the order in which they were selected.*

While the current beverages are being dispensed, it is possible to select additional beverages that are to be dispensed consecutively. These are displayed in the top right corner.

- ▶ Place a cup under the beverage outlet.
- ▶ Press the desired beverage button(s).
- ▶ After the first beverage has been dispensed, remove the cup and place the next cup under the beverage outlet.

Delete beverages in the pre-selection.

- ▶ Press the [X] button.



- The pre-selected beverages are deleted.
- The current beverage is fully dispensed.
- ▶ Pressing [✖] again will also end the current dispensing process prematurely.

## Double beverage



*If the option is configured, you can press the [2 x] button to dispense two beverages at once.*



- ▶ Place cups under the beverage outlet.
- ▶ Press the [2 x] button.
- ▶ Press the desired beverage button.
- ▶ Remove the cups after the beverages have been dispensed.

## Emptying

### Grounds container



*Coffee grounds land in the grounds container. Beverage dispensing is blocked as long as the grounds container has not been inserted.*

**CAUTION!**  
Risk of machine  
damage!



**Operating the automatic beverage outlet manually will damage it. When removing the grounds container, make sure this does not affect the automatic beverage outlet.**

- ▶ Push the manual beverage outlet into the highest position.
- ▶ Remove the grounds container.
- ▶ Empty the grounds container and reinsert it.
  - The machine is ready for use again.

### Under-counter grounds disposal

The coffee grounds cakes ejected out of the brewing unit pass through the under-counter grounds disposal cutout and into the grounds container below the counter.

- ▶ Open the counter door and remove the under-counter grounds container.
- ▶ Empty the under-counter grounds container.
- ▶ Return the under-counter grounds container to its proper position and close the counter door.



*When the container is full, no instruction to empty it will appear on the machine's display. The under-counter grounds container should therefore be checked at regular intervals.*

### Waste water tank

In coffee machines with an external waste water tank, the tank needs to be emptied regularly, at the latest when the empty instruction appears on the display.

- ▶ Remove and empty the waste water tank.
- ▶ Clean the waste water tank thoroughly with household cleaner and rinse with fresh water.
- ▶ Replace the waste water tank.

## Transport conditions

**CAUTION!**  
User at risk!



**Transporting the coffee machine incorrectly can result in injuries. Observe the general regulations for health and safety.**

- ▶ Before moving the coffee machine, it is essential that you detach the drinking water supply, power supply and waste water outlet.
- ▶ Before moving the coffee machine, check the floor for obstacles and uneven areas.

**CAUTION!**  
Risk of machine damage!



**Improper transport of the machine could damage the machine. Adhere to the following instructions when moving machines on a cart:**

- For safety reasons, the cart must be pulled and not pushed when moving the coffee machine.
- Only pull on the cart and never on the machine.
- The cart is not intended for transporting cargo.



*The manufacturer cannot be held liable for any damage resulting from unintended use of the cart or from failure to follow the operating instructions.*

## Display messages/instructions

Display message	Cause	What to do
Grounds container missing	<ul style="list-style-type: none"> <li>• The grounds container was pulled out (cleaning programme, emptying, etc.).</li> <li>• The limit switch is faulty.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Insert the grounds container.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Empty grounds container	The grounds container is full.	▶ Empty the grounds container.
Cleaning programme	Appears when a programmed number of beverages has been dispensed without the machine being cleaned.	▶ Carry out the daily cleaning routine (refer to the "Cleaning" chapter).
Left/right G, beans empty	Appears when the bean hopper is empty or when a coffee bean has become stuck.	▶ Fill bean hopper with coffee beans (max. 1,000 g per hopper) and confirm.
Left/right G blocked	An object (e.g. stone) is stuck in the grinder.	▶ Check the grinder for clogging and remove the remaining beans with a vacuum cleaner if necessary.
Heating coffee/hot water/steam	The temperature is 10 °C below the programmed temperature.	<ul style="list-style-type: none"> <li>▶ Wait until the target temperature has been reached.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Filter exchange	The programmed water volume (litres/month) has passed through the filter.	▶ Contact your service partner.
Service instruction	The programmed number of beverages (cups/month) has been reached. Service is required.	▶ Contact your service partner.
Drinking water tank empty	<ul style="list-style-type: none"> <li>• Drinking water tank is empty.</li> <li>• The float switch is defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Fill the drinking water tank and place it beneath the counter.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Waste water tank full	<ul style="list-style-type: none"> <li>• Waste water tank is full.</li> <li>• The float switch is defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Empty the waste water tank and place it beneath the counter.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>

Display message	Cause	What to do
Add ground coffee	<ul style="list-style-type: none"> <li>• [DECAF] field has been pressed in order to dispense a decaffeinated beverage.</li> <li>• The inlet for ground coffee and cleaning tablets has been opened.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Add ground coffee to dispense a decaffeinated beverage.</li> <li>▶ Close the inlet for ground coffee and cleaning tablets.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Flavour 1 empty Flavour 2 empty Flavour 3 empty Flavour 4 empty	<ul style="list-style-type: none"> <li>• The corresponding bottle is empty.</li> <li>• The sensor is defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Place full bottle in the Flavour Point and connect.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>

## Switching off

### End of operation

#### Option 1: Operator service mode



- ▶ Perform the daily cleaning routine.
  - The machine switches to standby once the cleaning programme is finished.

#### Option 2: External drinking and waste water tank

- ▶ Empty the drinking water tank and rinse it with fresh water.
- ▶ Empty the waste water tank and clean it thoroughly with fresh water.

#### Option 3: Milk system

- ▶ Remove the milk container.
- ▶ Empty and clean the milk container.

### Lengthy downtimes (more than 1 week)

Proceed as for end of operation. Additional steps:

- ▶ Disconnect the power plug of the machine from the power supply.
  - The machine is de-energised.
- ▶ Close the stopcock of the drinking water supply.



*After a long period of out of operation, the machine must be cleaned after it has been switched on.*



*Failure to do so will result in a loss of warranty coverage in the event of damage.*

**CAUTION!**  
Risk of machine damage!

**There is a risk that the water pump may run dry. When taking the device back into service, the stopcock of the drinking water supply must be opened before the machine is switched on.**

# Cleaning

## Cleaning intervals

Cleaning intervals					
Daily	Weekly	As needed	Instruction	Optional	
Automatic cleaning					
x					Cleaning programme
x					Automatic rinsing (if programmed)
x		x			Hot rinsing
x		x		O	Milk hose rinsing
x		x		O	Milk system cleaning
Manual cleaning					
x		x			Automatic outlet
x		x		O	Steam wand
x					Grounds container
x					Drip tray and drip grid
x					Cleaning exterior
x					Brewing chamber
	x	x			Bean hopper/powder container
x				O	Mixer
x				O	Milk container
x				O	Cooling unit
	x	x		O	Flavour Point
x				O	Drinking water tank (external)
x				O	Waste water tank (external)

### Legend

Daily:	At least once a day, or more often if necessary.
Weekly:	At least once a week, or more often if necessary.
As needed:	As needed (if dirty).
Instruction:	Instructions appear on the display.
Optional:	Depending on machine equipment.



For a better overview of the cleaning steps that are required or that have already been performed, use the cleaning schedule in this chapter.

## Cleaning products

**CAUTION!**  
Risk of machine  
damage!



Use of incorrect cleaning products may damage the machine.  
Use only cleaning products for daily and weekly cleaning that are recommended by Schaefer AG.



Before using a cleaning product, read the information on the packaging and the safety data sheet carefully. If a safety data sheet is not available, please request it from your sales partner.



Cleaning tablets for coffee system	
Application	Daily cleaning of the coffee system
Purpose of cleaning	Removal of grease residue in the coffee system
Application interval	Once daily

## Cleaning powder for the "Milkpure powder" milk system



Information	
Application	Milk system cleaning
Purpose of cleaning	Removal of milk fat and bacteria from the milk system
Application interval	Use one 10 g bag once a day

## Cleaning instructions



With the exception of the scheduled time, the cleaning request can only be programmed and set by a service technician.



To schedule the cleaning request using the CHEF card, see "Cleaning request" in the "Programming" chapter.

Several options are available for the cleaning request:

### Option 1: No cleaning request

Cleaning request is deactivated.

### Option 2: Cleaning instructions with message

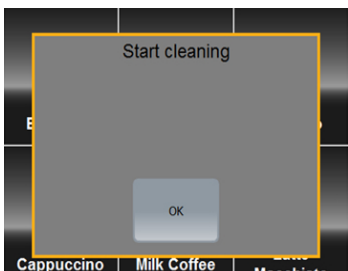
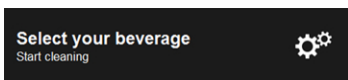
The cleaning instructions appear at the set time. Beverage dispensing is still possible. Acknowledgement of the message is not necessary.

### Option 3: Cleaning instructions with message and acknowledgement

The cleaning instructions appear at the set time. In order for beverages to still be served, this must be acknowledged. However, beverages can still be served without a cleaning.

- ▶ Acknowledge message.
  - Message is hidden and operation is still possible.
  - Message is displayed again once per minute.

If cleaning is performed at least an hour ahead of the set time, the cleaning instructions will not be shown.





#### Option 4: Mandatory cleaning instructions

The cleaning instructions appear at the set time. The mandatory cleaning is activated after a specific time if the scheduled cleaning is not performed despite the instruction on the display and a beverage has been supplied since the last cleaning. Once the mandatory cleaning is active, beverage dispensing is blocked or the cleaning program is started and can only be exited again by completing the cleaning.

- ▶ Acknowledge message.
- ▶ Carry out the cleaning procedure.
  - Machine is once again ready for use.

## Cleaning options

**CAUTION!**  
Hot fluid!



### Hot rinsing

**Scalding hazard due to hot water.**

**Never reach beneath the beverage outlet or into the machine when beverages are being dispensed.**

#### Option 1: [Service] field visible

The "Service button visible" parameter in [TouchIT configuration] is activated.

- ▶ Press the [Service] field at the bottom left.
  - The "Service" menu opens.
- ▶ Press the [Rinsing] button. The rinsing cycle is performed.



#### Option 2: [Service] field hidden

The "Service button visible" parameter in [TouchIT configuration] is deactivated.

- ▶ Press and hold the upper right corner of the touch screen for  $\pm 2$  sec.
  - The "Service" menu opens.
- ▶ Press the [Rinsing] button. The rinsing cycle is performed.



*A PIN entry prompt can be set for "Self-service" mode. This is configured in the "Self-service settings" parameter.*

### Automatic rinsing

**Scalding hazard due to hot water.**

**Never reach beneath the beverage outlet or into the machine when beverages are being dispensed.**

**CAUTION!**  
Hot fluid!



*Rinsing is a precondition for operation of the Best Foam milk system.*



**Option 1: Start-up flush (cannot be deactivated)**

Hot rinsing is triggered as soon as the operating temperature is reached after starting the machine. A warning message appears on the display.

**Option 2: Shutdown flush (cannot be deactivated)**

Before the machine is switched off, a hot rinsing cycle is performed. A warning message appears on the display beforehand.

**Option 3: Flush coffee**



*This setting is useful for 24-hour operation. It avoids a "Water flow error" when the first coffee is dispensed after cleaning. Based on the espresso recipe.*



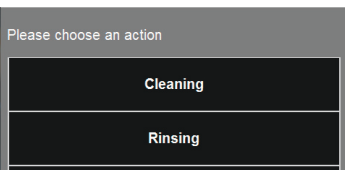
The flush coffee is dispensed immediately after cleaning. The flush coffee is not drinkable.

**Daily cleaning**

**Automatic cleaning programme**



*The machine automatically changes to standby after cleaning. This cannot be deactivated and is the prerequisite for a functioning milk system after cleaning.*

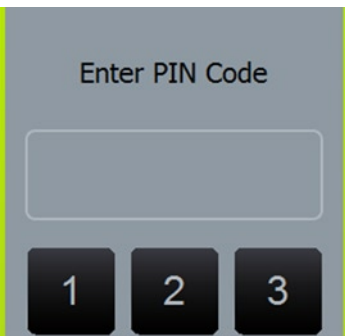


**Option 1: Without PIN request**

- ▶ Press the [⚙️] field.
  - The selection list appears.
- ▶ Press the [Cleaning] field.
  - The cleaning programme starts.
- ▶ Follow the instructions on the display.
  - Cleaning is performed.

**Option 2: With PIN request**

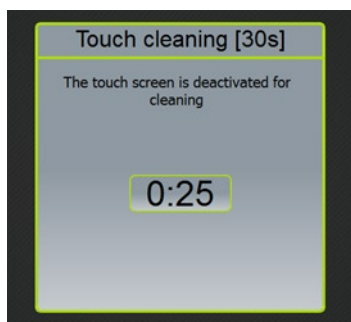
- ▶ Press the [⚙️] field.
  - The selection list appears.
- ▶ Press the [Cleaning] field.
  - The entry field for the PIN is shown.
- ▶ Enter the PIN.
  - The cleaning programme starts.
- ▶ Follow the instructions on the display.
  - Cleaning is performed.




**Touch screen**

**CAUTION!**  
Risk of machine damage!

**Damage to the touch screen during cleaning procedure.**  
Do not use abrasive cleaning products. Never use force, strong pressure or sharp objects when pressing on the display.



- ▶ Press the  field.
  - ☑ The selection list appears.
- ▶ Press the [Cleaning touch screen] field.
  - ☑ Touch screen is deactivated for 30 sec.
  - ☑ The display no longer reacts to input.
- ▶ Clean the touch screen using paper towels and a commercially available glass cleaner.
  - ☑ After the countdown ends, the touch screen is activated.

### Milk container

**CAUTION!**  
User at risk!



**There is a danger of contamination of the milk and milk container due to milk deposits and bacteria.**

**Clean the milk container and cover every time before filling.**

- ▶ Thoroughly rinse the milk container with fresh water several times.
- ▶ Carefully clean the milk container cover with fresh water.
- ▶ Dry with a clean cloth.

### Drinking water tank

**CAUTION!**  
User at risk!



**There is a contamination danger for the drinking water tank due to deposits and bacteria.**

**Rinse the drinking water tank daily; do not use cleaning products.**

- ▶ Thoroughly rinse the drinking water tank with fresh water several times.
- ▶ Dry with a clean cloth.

### Grounds container

**CAUTION!**  
User at risk!



**Coffee grounds in the grounds container can quickly lead to mould formation. The spread of mould spores in the machine results in the danger of contamination of the coffee.**

**Therefore, clean the grounds container daily.**

- ▶ Thoroughly clean the grounds container with water and a household cleaning product.
- ▶ Rinse with clear water and dry with a clean cloth.

### External waste water tank

**CAUTION!**  
User at risk!



**There is a danger of contamination for the waste water tank due to deposits and bacteria.**

**Rinse and clean the waste water tank and cover every day.**

- ▶ Thoroughly rinse the waste water tank with fresh water several times.
- ▶ Thoroughly clean the cover of the waste water tank with fresh water.
- ▶ Dry with a clean cloth.

### Side cooling unit

**CAUTION!**  
User at risk!



**There is a risk of contamination of the milk and cooling unit due to milk deposits and bacteria.**

**Clean the cooling unit daily.**

- ▶ Take the milk container out of the cooling unit.
- ▶ Wipe out the inside of the cooling unit with fresh water and a fresh, unused cloth.
- ▶ Place the milk container back into the cooling unit.



See also "Safety notes" - "Hygiene rules" - "Milk".

### Automatic beverage outlet

**CAUTION!**  
Hot fluid!



There is a risk of scalding during cleaning of the automatic beverage outlet and its outlet protection.

Do not come into contact with hot water. Only use a cleaning brush with a long handle. Clean the outlet protection daily.

Cleaning

- ▶ Clean the outlet protection under running water with a brush during machine cleaning.



## Manual weekly cleaning

### Bean hopper

Old coffee bean oil can have a negative effect on the taste of the coffee.

**CAUTION!**  
User at risk!



Rotating grinding gauges in the grinder are an injury hazard. Never reach into the bean hoppers while the coffee machine is switched on.

**CAUTION!**  
Risk of machine damage!



Scratches on bean hoppers. Do not use abrasive cleaning products.



- ▶ Latch bean hopper using knob.
- ▶ Pull slider forwards.
  - Opening leading to machine is locked.
- ▶ Remove bean hopper.
- ▶ Remove remaining coffee beans from machine and bean hopper.
- ▶ Rinse bean hopper thoroughly under running water and wipe clean using a soft cloth.
- ▶ Dry the cover and hopper with a clean cloth.
- ▶ Reattach the bean hopper.
- ▶ Push the slider backwards.
  - Opening leading to machine is unlocked.
- ▶ Refill the beans.

### Defrosting cooling unit (Option)

**CAUTION!**  
Risk of machine damage!



The surface of the cooling unit interior can be damaged. Never remove the ice layer with pointed or sharp objects; always let it defrost.

- ▶ Switch off the additional side cooling unit or pull out the mains plug.
- ▶ Open the front door and leave it open.
- ▶ Wipe up the condensation water incurred with an absorbent cloth.
- ▶ Repeat the procedure until the ice layer has melted completely.
- ▶ Close the front door and switch the device on again or reinsert the mains plug.

## Flavour Point (option)

**CAUTION!**  
User at risk!



**Danger of contamination due to deposits and bacteria.  
Clean the Flavour Point weekly or as needed.**

- ▶ Remove bottles from the Flavour Point.
- ▶ Clean the Flavour Point interior with hot water and a household cleaner.
- ▶ Return bottles to the Flavour Point.



*See also "Safety notes" - "Hygiene rules" - "Syrup". See also "Schaerer Coffee Art Plus with Flavour Point" under "As needed" in the "Cleaning" chapter.*

## Schaerer Coffee Art Plus with powder system (option)



See also "Precautionary measures" and "Cleaning" in the operating instructions.

**CAUTION!**  
User at risk!



There is a risk of scalding in the dispensing area of beverages, hot water and steam. Never reach under the dispensing points while the machine is dispensing or during cleaning.

**CAUTION!**  
Hot fluid!



Danger of scalding when dispensing a powder based beverage if the hose is disconnected from the mixer. Before disconnecting the hose from the mixer, pull out the grounds drawer.

**CAUTION!**  
Risk of machine damage!



The machine can be damaged if the cleaning products are used incorrectly. Do not insert Milkpure powder into the manual inlet under any circumstances.

### Powder system cleaning

1



The powder system must be cleaned at least once a week.

2



- ▶ Push cover up and remove.
- ▶ Remove beverage hose on outlet mixing cup.
- ▶ Pull out the grounds drawer.
  - Beverage dispensing is blocked.

3



- ▶ Turn lever under outlet mixing cup anticlockwise.
- ▶ Pull outlet mixing cup forward.
- ▶ Remove beverage hose from machine.

4



- ▶ Disassemble the mixing cup into 2 parts (see figure).
- ▶ Clean parts and beverage hose under warm running water.

*Do not mount the parts before they are dry.*

5



- ▶ Reassemble the mixing cup in reverse order. Reinstall hoses (do not forget spring).
- ▶ Place a collection bowl under the mixer again.
- ▶ Reattach the cover.
- ▶ Grounds drawer can be pushed back in.

6



- ▶ Start automatic cleaning.
- ▶ Follow the information on the display.

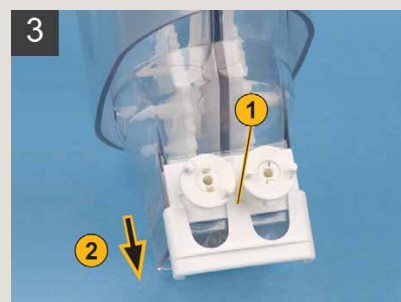
## Powder system cleaning as needed



- ▶ Open lock.
- ▶ Remove powder container.
- ▶ Discard the remaining powder.



- ▶ Remove and clean funnel above the mixer.
- ▶ Remove stubborn residue with a cleaning brush.
- ▶ Reattach the funnel.



- ▶ Lift cover in the centre (1) and push down (2).



- ▶ Pull augers out.
- ▶ Clean the powder container and parts under warm, running water.

*Do not mount the parts before they are dry.*

- ▶ Replace augers in reverse order.
- ▶ Push augers into the powder container.
- ▶ Reattach the cover.
- ▶ Replace powder container.
- ▶ Close lock.

**CAUTION!**  
User at risk!



Improper handling of beans, water, milk, powder or other coffee ingredients can lead to health problems!  
Comply with the hygiene regulations stipulated in HACCP!



See also "Safety instructions" - "HACCP hygiene regulations" in the operating instructions.

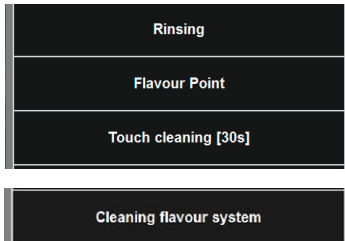
## As needed


### Flavour Point (option)

**CAUTION!**  
User at risk!



There is a risk of scalding in the area where beverages, hot water and steam are dispensed.  
Never reach under the dispensing points while the machine is dispensing or during cleaning.



- ▶ Press the [  ] field.
  - ☑ The "Service" menu opens.
- ▶ Select the [Flavour Point] field.
  - ☑ The Flavour Point submenu is displayed.
- ▶ Select the [Cleaning Flavour Point] field.
  - ☑ The cleaning programme starts.
- ▶ Follow the instructions on the display.
  - ☑ Cleaning is performed.

### Drip tray

**CAUTION!**  
Risk of machine damage!



High temperatures may lead to damage.  
Never clean the drip tray in the dishwasher.



- ▶ Thoroughly clean the drip tray and the drip grid with water and a household cleaning product.
- ▶ Rinse with clear water and dry with a clean cloth.

### Cup warmer

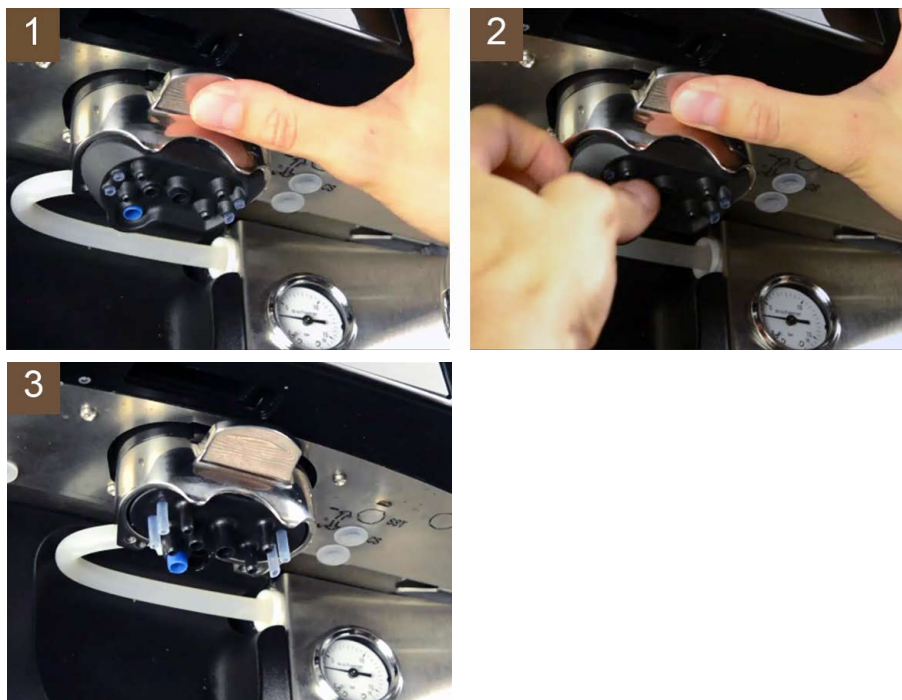


*The cleaning for the cup warmer is described in the separate operating instructions "Cup warmer / Cup & Cool".*

### Disassembly/assembly of outlet protection

#### Dismantling

- ▶ Secure the automatic beverage outlet by hand (Fig. 1).
- ▶ Grip the back of the outlet protection (Fig. 2).
- ▶ Pull the outlet protection downwards (Fig. 3).
  - ☑ Outlet protection is dismantled.



#### Cleaning

- ▶ Visual inspection of the beverage outlet without protection.
- ▶ In exceptional cases, clean the unprotected outlet with a brush and fresh water.
- ▶ Thoroughly clean the removed outlet protection separately with fresh water.

#### Installation

- ▶ Place the outlet protection on the back of the beverage outlet (Fig. 1).

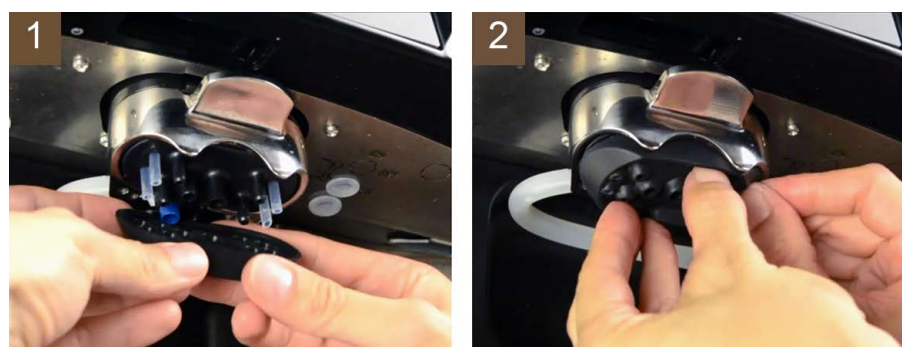


*Make sure that the choco hose is not pushed up when the outlet protection is being pressed on firmly.*

- ▶ Press the outlet protection upward (Fig. 2).
- ▶ Press the outlet protection on firmly upward over the entire surface (Fig. 3).



*The dispensing points must protrude (Fig. 4).*





## HACCP cleaning concept

When installation, maintenance, care and cleaning are performed properly, Schaefer AG coffee machines satisfy the conditions of HACCP requirements.

**CAUTION!**  
Risk of machine  
damage!



**If the coffee machine is not cared for and cleaned properly, the dispensing of milk beverages will become a health hazard in terms of food hygiene.**

**Note and adhere to the following instructions:**

- Wear safety gloves during cleaning.
- Wash your hands thoroughly before and after cleaning.
- Clean the coffee machine daily after beverage supply has ended.
- Clean the milk container every time before filling and after you have finished dispensing beverages for the day.
- Never pour cleaning products into the milk container.
- Never pour cleaning products into the drinking water tank (internal/external).
- Never mix cleaning products.
- Store cleaning products separately from coffee, milk and coffee machine powder.
- Do not use any abrasive products, brushes or cleaning tools made of metal.
- Do not touch parts that come into contact with beverages after cleaning.
- Read and follow the dosing and safety notes specified on the cleaning product.
- For daily and weekly cleaning, proceed as described in the operating instructions and on the cleaning cards.



*For a better overview of pending and completed cleaning, use the cleaning schedule in this chapter.*

## Service and maintenance

### Maintenance

The coffee machine requires regular maintenance. The maintenance schedule depends on multiple factors, especially the degree to which the machine is used.

When maintenance is due, the machine indicates this on the display. The machine can continue to be operated normally.

- Notify your service partner that maintenance is due.

**CAUTION!**  
Risk of machine  
damage!



**Failure to perform required maintenance in due time may lead to wear and mean that reliable operation is no longer assured.**

**Inform the service partner as soon as possible after the maintenance message appears.**

#### Option 1: Schaefer Coffee Art Plus TouchIT:

After 55,000 beverages are dispensed.

#### Option 2: Further maintenance intervals applicable to all devices:

Safety valves: every 12 months.

Boilers (steam boilers, continuous flow heaters): every 72 months.

**CAUTION!**  
Risk of machine  
damage!



**The manufacturer will assume liability under warranty in respect of any claims only and exclusively if the prescribed maintenance intervals are observed.**









### External water filter?



*The external water filter must be replaced by an authorised service partner/service technician after the programmed number of litres is reached.*

# Programming

## Navigation

Symbol	Description
	Stops/cancels dispensing of a beverage
	Back to previous window
	Save settings that have been made
	Delete / set a value to zero
	Dispense test beverage in the beverage settings mode. This field is used to start the dispensing of a test beverage. After dispensing, information about the dispensing time and the brewing time is displayed.
	Touching this field opens the control dial: <ul style="list-style-type: none"> <li>▶ Set the desired value by moving the dial up and down.</li> <li>▶ Confirm the value you have set by pressing the tick.                         <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The set value is accepted and displayed in the field.</li> </ul> </li> </ul>
	Enables/Disables a function
	Opens a selection field.

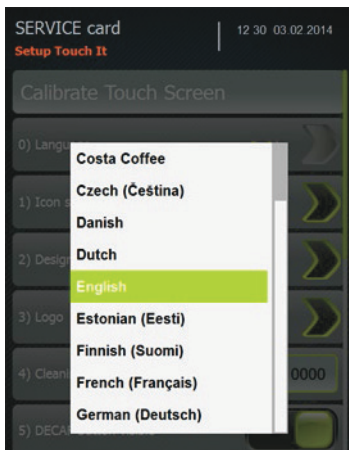
## Setting examples



### Enabling/Disabling parameters

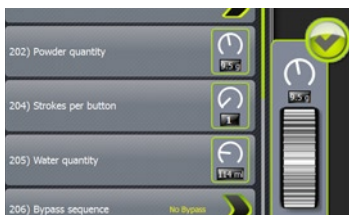
- ▶ Press the field next to the corresponding parameter.
  - ☑ Field on right side and green = parameter enabled.
  - ☑ Field on left side and grey = parameter disabled.

### Selection list



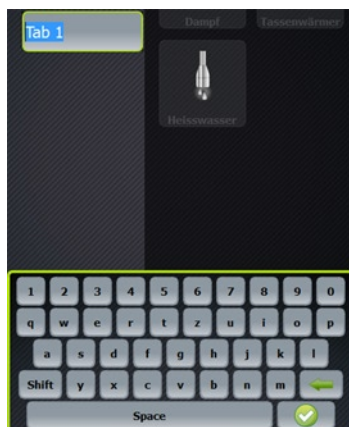
- ▶ Press the arrow next to the corresponding parameter.
  - ☑ The selection list is displayed.
- ▶ If available, use the scroll bar to scroll to the desired item.

### Adjusting setting range



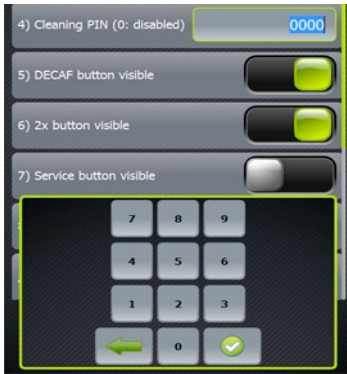
- ▶ Press the [ ] field next to the corresponding parameter.
  - ☑ The control dial appears.
- ▶ Turn the control dial upwards or downwards to adjust the value.
  - ☑ Upwards - value increases.
  - ☑ Downwards - value decreases.
  - ☑ The current value is displayed above the control dial.
- ▶ Confirm the desired value with [ ].
  - ☑ Value is then applied.

### Parameters with lettering



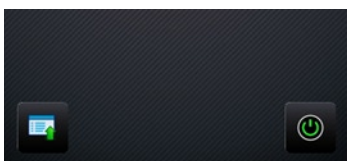
- ▶ Press and hold the text field for a few seconds.
  - ☑ The keyboard appears.
- ▶ Enter text using the keyboard.
- ▶ Confirm with [ ].
  - ☑ The keyboard closes.

### Parameters with numbers



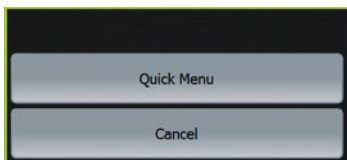
- ▶ Press on the corresponding text field.
  - The number pad appears.
- ▶ Enter numbers using the number pad.
- ▶ Confirm input with [].
  - The number pad closes.

### Standby quick menu

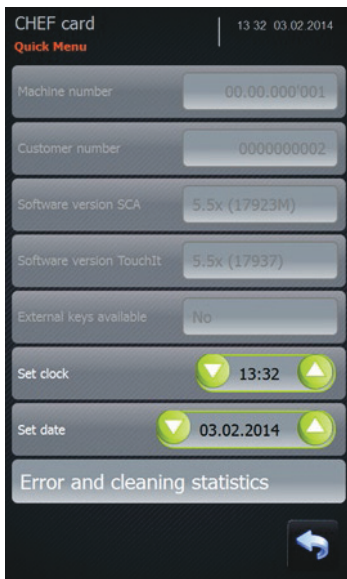


Displaying information, settings and statistics in standby mode:

- ▶ Press the [] field.
- ▶ Select the [Quick Menu].
  - The "Quick Menu" opens.



The following information is displayed:



- Machine number
- Customer number
- SW Version SCA
- SW Version TouchIT
- Availability of external buttons
- Errors and cleaning statistics (see "Counters and statistics" on page 65)

The following settings can be configured: Clock



- ▶ Select the [Set clock] field.
- ▶ Select hour or minutes and set time using the arrow buttons.

Date



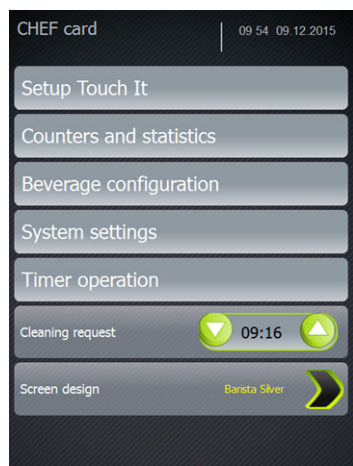
- ▶ Select the [Set date] field.
- ▶ Select day, month or year and set date using the arrow buttons.

## Entering the programming level

The programming level requires a CHEF (or SERVICE) card.



*Inactive parameters are only accessible with the SERVICE card.*



- ▶ Start machine.
- ▶ Insert the CHEF card into the card reader.
  - ☑ The CHEF card menu opens.
- ▶ Configure settings and save.
- ▶ Remove CHEF card.
  - ☑ The machine is restarted.

If the service technician activates the CHEF card, the following menu items are available:

- TouchIT configuration
- Counters and statistics
- Beverage settings
- System settings
- Automatic timer
- Cleaning instructions
- View mode

## TouchIT configuration

The "TouchIT configuration" menu contains the following items:




- Calibrate Touch Screen
- Language
- Beverage button symbols
- Logo
- Cleaning PIN
- Service PIN
- Timeout for pre-selection (standard beverage group)
- Screensaver timeout
- Image selection for screensaver
- External buttons
- Name, flavour pump 1-4
- Symbol, flavour pump 1-4




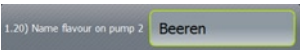



*The contents of these menu items are described in this section.*



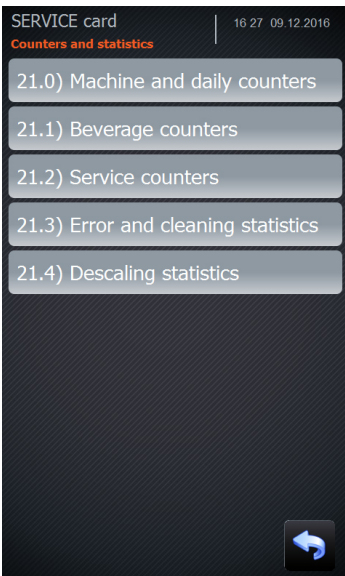
*Any changes made become active after: 1) the save button has been pressed, 2) the CHEF card has been removed, and 3) the software has been automatically reloaded (during start-up).*

Parameters: TouchIT configuration		
Display text	Setting range	Description
Calibrate display	–	<p>Calibrating display:</p> <p>During calibration, a cross appears on different positions of the display.</p> <ul style="list-style-type: none"> <li>▶ When the cross appears on the display, press and hold it until the calibration procedure is finished.</li> </ul>  <p>Press the touch screen from the bottom (see figure). Pressing with the hand facing to the left or right at the same height as the finger and pressing with the fingertips leads to much poorer results.</p> <p>For safety reasons, the Touch Screen glass has a thickness of 3 mm, meaning that a sensitivity similar to that of a smartphone, for example, should not be expected.</p> <p>It is advisable to calibrate the display if users have problems with the touch screen. For example, this is the case if no reaction is triggered when a field is pressed.</p>
Language	All provided languages	Changes the display language.
Beverage button symbols	(A) Text only (B) Set 1 (C) Set 2 (D) Set 3	<p>Four different symbol sets are available.</p> <ul style="list-style-type: none"> <li>▶ Select the desired symbol set.</li> </ul> 
Logo (in Standby mode)	All stored images	<p>Selection from the images stored in the system.</p> <p>See "Touch screen images".</p>
Cleaning PIN	0-9999	<p>Activates the request for a PIN before cleaning.</p> <ul style="list-style-type: none"> <li>▶ Enter the PIN number in the field.                             <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> PIN request before cleaning.</li> </ul> </li> <li>▶ Entry field contains (0000).                             <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> No PIN request before cleaning.</li> </ul> </li> </ul> <p>(0000) The PIN request is deactivated.</p>
Service PIN	0-9999	<p>Assigns a PIN for the Service menu.</p> <ul style="list-style-type: none"> <li>▶ Enter the PIN number in the field and confirm.</li> </ul>
Timeout for pre-selection 	0-999 sec	<p>Sets the time that elapses before a defined standard tab level is displayed on the touch screen.</p> <ul style="list-style-type: none"> <li>▶ Make the time setting.</li> </ul> <p>This function is deactivated when set to "0 sec".</p> <p>Standard tab is defined by the service technician.</p>

Parameters: TouchIT configuration		
Display text	Setting range	Description
Screensaver timeout 	0-999 sec	Sets period of time that must expire before a selected screen saver picture is displayed on the Touch Screen. ► Make the time setting. <input checked="" type="checkbox"/> The "Screen saver picture" parameter appears. <i>See "Logo/Screensaver" for further information.</i> This function is deactivated when set to "0 sec".
Screen saver picture 	All stored images	Opens the selection menu for the stored screensaver images. ► Select an image from the selection list as the screen-saver image. <input checked="" type="checkbox"/> The selected image appears on the touch screen after the set time elapses. <i>See "Logo/Screensaver" for further information.</i>
External buttons 	-	Activates additional buttons on the user panel. Enables direct dispensing of steam and/or hot water.  "Off" setting: <input checked="" type="checkbox"/> A search request is not performed and the "additional buttons" function is not active.  If set to "ON": <input checked="" type="checkbox"/> Activates the installed additional buttons without a search request.  "Auto detect device" setting: <input checked="" type="checkbox"/> The search request starts every time the machine is started. The function is activated when the additional buttons are installed. This function requires additional buttons on the user panel and an additional board. The search request while the machine is starting takes $\pm 4$ sec.
Name, flavour pump 1 Name, flavour pump 2 Name, flavour pump 3 Name, flavour pump 4 	Text input	If the SCAP TouchIT is equipped with a Flavour Point, the description of the flavour can be defined in this parameter. If the symbol is changed, the standard description is displayed. Only active on machines with Flavour Point.
Symbol, flavour pump 1 Symbol, flavour pump 2 Symbol, flavour pump 3 Symbol, flavour pump 4 	Text input	Selection of the symbol for the flavour at positions 1-4. If the symbol is changed, the standard description is displayed for the name. Only active on machines with Flavour Point.

## Counters and statistics

The "Counters and statistics" menu contains the following items and information:



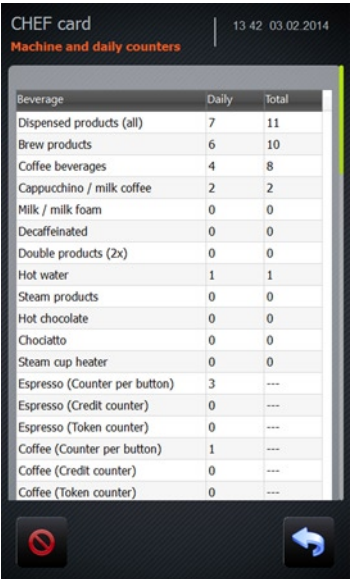
- Machine and daily counters
- Beverage counter
- Service counter
- Errors and cleaning statistics

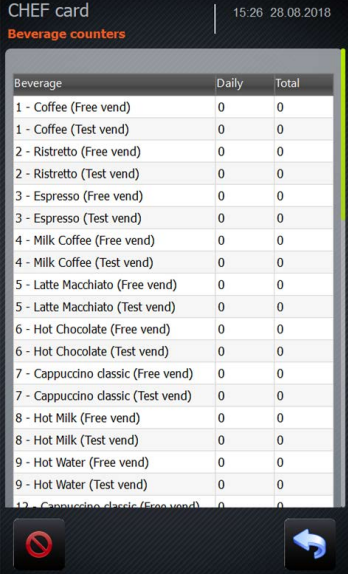
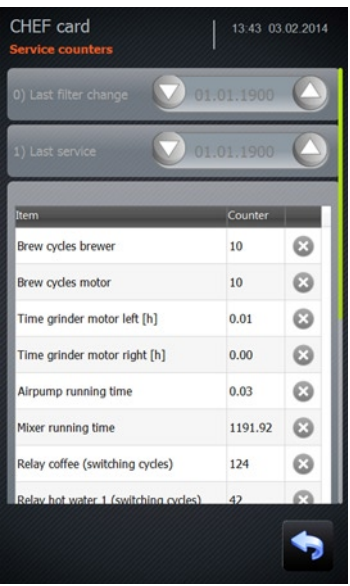




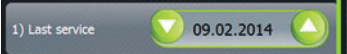

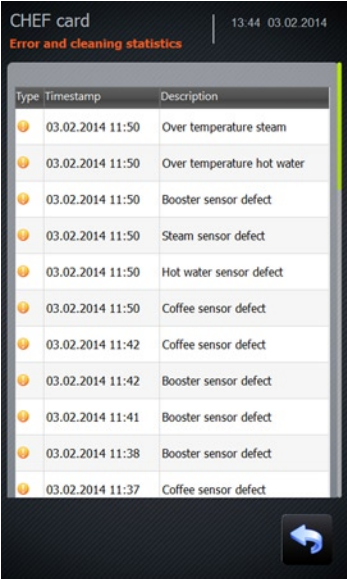
The contents of the submenu are described in this chapter.



Any changes made become active after: 1) the save button has been pressed, 2) the CHEF card has been removed, and 3) the software has been automatically reloaded (during start-up).

Parameters: Counters and statistics		
Display text	Setting range	Description
<p>Machine and daily counter</p> 	<p style="text-align: center;">-</p>	<p>Displays the machine and daily counters.</p> <p>The display is divided into 3 columns:</p> <ul style="list-style-type: none"> <li>• Description of the function or beverage being counted.</li> <li>• Daily counter.</li> <li>• Total count.</li> </ul> <p>Machine and daily counters can only be cleared using the SERVICE card.</p> <p>The machine and daily counters can be displayed using the SERVICE card and the CHEF card.</p>

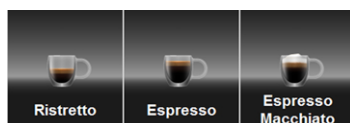
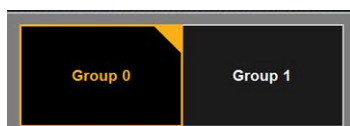
Parameters: Counters and statistics																																																														
Display text	Setting range	Description																																																												
<p>Beverage counter</p>  <table border="1"> <thead> <tr> <th>Beverage</th> <th>Daily</th> <th>Total</th> </tr> </thead> <tbody> <tr><td>1 - Coffee (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>1 - Coffee (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>2 - Ristretto (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>2 - Ristretto (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>3 - Espresso (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>3 - Espresso (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>4 - Milk Coffee (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>4 - Milk Coffee (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>5 - Latte Macchiato (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>5 - Latte Macchiato (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>6 - Hot Chocolate (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>6 - Hot Chocolate (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>7 - Cappuccino classic (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>7 - Cappuccino classic (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>8 - Hot Milk (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>8 - Hot Milk (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>9 - Hot Water (Free vend)</td><td>0</td><td>0</td></tr> <tr><td>9 - Hot Water (Test vend)</td><td>0</td><td>0</td></tr> <tr><td>12 - Cappuccino classic (Free vend)</td><td>0</td><td>0</td></tr> </tbody> </table>	Beverage	Daily	Total	1 - Coffee (Free vend)	0	0	1 - Coffee (Test vend)	0	0	2 - Ristretto (Free vend)	0	0	2 - Ristretto (Test vend)	0	0	3 - Espresso (Free vend)	0	0	3 - Espresso (Test vend)	0	0	4 - Milk Coffee (Free vend)	0	0	4 - Milk Coffee (Test vend)	0	0	5 - Latte Macchiato (Free vend)	0	0	5 - Latte Macchiato (Test vend)	0	0	6 - Hot Chocolate (Free vend)	0	0	6 - Hot Chocolate (Test vend)	0	0	7 - Cappuccino classic (Free vend)	0	0	7 - Cappuccino classic (Test vend)	0	0	8 - Hot Milk (Free vend)	0	0	8 - Hot Milk (Test vend)	0	0	9 - Hot Water (Free vend)	0	0	9 - Hot Water (Test vend)	0	0	12 - Cappuccino classic (Free vend)	0	0	-	<p>Lists all beverage counters.</p> <p>The following counters are listed:</p> <ul style="list-style-type: none"> <li>• Daily dispensed products</li> <li>• Total dispensed products</li> </ul> <p>Beverage counters can only be cleared using the SERVICE card.</p> <p>The beverage counters can be displayed using the SERVICE card and the CHEF card.</p>
Beverage	Daily	Total																																																												
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<p>Service counter</p>  <table border="1"> <thead> <tr> <th>Item</th> <th>Counter</th> </tr> </thead> <tbody> <tr><td>Brew cycles brewer</td><td>10</td></tr> <tr><td>Brew cycles motor</td><td>10</td></tr> <tr><td>Time grinder motor left [h]</td><td>0.01</td></tr> <tr><td>Time grinder motor right [h]</td><td>0.00</td></tr> <tr><td>Airpump running time</td><td>0.03</td></tr> <tr><td>Mixer running time</td><td>1191.92</td></tr> <tr><td>Relay coffee (switching cycles)</td><td>124</td></tr> <tr><td>Relay hot water 1 (switching cycles)</td><td>42</td></tr> </tbody> </table>	Item	Counter	Brew cycles brewer	10	Brew cycles motor	10	Time grinder motor left [h]	0.01	Time grinder motor right [h]	0.00	Airpump running time	0.03	Mixer running time	1191.92	Relay coffee (switching cycles)	124	Relay hot water 1 (switching cycles)	42	-	<p>Lists all service counters.</p> <p>The following counters are listed:</p> <ul style="list-style-type: none"> <li>• Number of piston strokes per brewing unit.</li> <li>• The operating hours of the grinders and water pump.</li> <li>• The runtime of the air pump and mixer.</li> <li>• The relay switching procedures for coffee, hot water and steam.</li> <li>• The grind quantity of the grinders.</li> </ul> <p>Machine and daily counters can only be cleared using the SERVICE card.</p> <p>The service counters can be displayed using the SERVICE card and the CHEF card.</p>																																										
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<p>Service counter (filter change)</p> 	-	<p>Enter the date of the last filter change.</p> <ul style="list-style-type: none"> <li>▶ Select a date range: day, month or year.</li> <li>▶ Enter the date using the arrow buttons (up/down).</li> <li>▶ Save the entry with the [  ] field that appears. <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The last filter change date is displayed.</li> <li><input checked="" type="checkbox"/> The entry field is deactivated (grey).</li> </ul> </li> </ul> <p>See "System" – "Restore / Backup" for further information on restoring counters and statistics.</p> <p>The parameter remains deactivated until the current date is no longer identical to the set date.</p> <p>This parameter can only be adjusted with the SERVICE card.</p> <p>See "Configuration" - "Date / Time / Alarm" on setting the filter change parameters.</p>																																																												

Parameters: Counters and statistics		
Display text	Setting range	Description
<p>Service counter (last service)</p> 	-	<p>Enter the date of the last service that was performed.</p> <ul style="list-style-type: none"> <li>▶ Select a date range: day, month or year.</li> <li>▶ Enter the date using the arrow buttons (up/down).</li> <li>▶ Save the entry with the [  ] field that appears. <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The date of the last service request is displayed.</li> <li><input checked="" type="checkbox"/> The entry field is deactivated (grey).</li> </ul> </li> </ul> <p>See "System" – "Restore / Backup" for further information on restoring counters and statistics.</p> <p>The parameter remains deactivated until the current date is no longer identical to the set date.</p> <p>This parameter can only be adjusted with the SERVICE card.</p> <p>See "Configuration" - "Date / Time / Alarm" on setting the service request parameters.</p>
<p>Error and cleaning statistics</p> 	-	<p>Display of the error and cleaning statistics.</p> <p>The display is divided into 3 columns:</p> <ul style="list-style-type: none"> <li>• Symbol showing type of message.</li> <li>• Time stamp with the date and time of the error message.</li> <li>• Description with a definition of the error message.</li> </ul> <p>The statistics cannot be cleared.</p> <p>The statistics can be displayed using the SERVICE card and the CHEF card.</p>

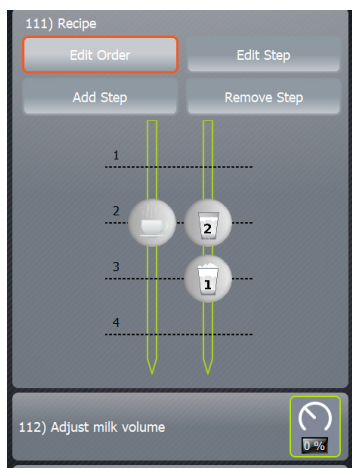
## Beverage configuration



*Inactive parameters are only accessible with the SERVICE card.*



- ▶ Call up the "Beverage settings" menu.
- ▶ Select the corresponding group.
- ▶ Select the corresponding beverage from the group.



Settings for the desired beverage are displayed.

- ▶ Make the setting.
- ▶ Save the setting.

The beverage settings contain the following menu items:

- Coffee settings
- Milk mix settings
- Milk settings
- Foam settings
- Milk powder settings
- Choco settings
- Hot water settings
- Cup warmer settings
- Steam settings
- Flavour settings



The contents of these menu items are described in this section.



Any changes made become active after: 1) the save button has been pressed, 2) the CHEF card has been removed, and 3) the software has been automatically reloaded (during start-up).

### Dispensing a test beverage







To check settings for a beverage, a test beverage can be dispensed in the Individual beverage settings.

- ▶ Place a suitable container below the beverage outlet.
- ▶ Press the field.
- ▶ Depending on the beverage, the size can be selected.
  - The beverage is dispensed with the previously chosen parameter settings.
  - Once the product has been dispensed, the dispensing and brewing times are displayed.



### Coffee settings

Parameters: Coffee settings		
Display text	Setting range	Description
Grind quantity 	4-16 g  Standard values are: 9.5 g (Ristretto) 9.5 g (Espresso) 9.0 g (Coffee) 9.0 g (Cappuccino) 9.0 g (Latte) 8.5 g (L.macchiato) 9.0 g (Chociatto) 9.0 g (White Americano) 9.0 g (Americano)	Lower limit 4 g: When beverages with less than 4 g coffee are vended, the brewing unit becomes soiled very quickly.  Upper limit 16 g: The maximum quantity of coffee that will fit into the brewing chamber.

Parameters: Coffee settings		
Display text	Setting range	Description
Water volume 	1–600 ml  Standard values are: 25 ml (Ristretto) 35 ml (Espresso) 110 ml (Coffee) 35 ml (Cappuccino) 35 ml (Milk coffee) 35 ml (L. macchiato) 35 ml (Chociatto) 35 ml (White americano) 35 ml (Americano)	Defines the water quantity for the selected beverage.
Bypass water 	"With coffee"  "After/before coffee": 0-30 sec	Setting "With coffee", "Before coffee" or "After coffee".  The setting for the bypass water is always made in sec.  Note the instructions in the "Bypass brewing accelerator/ Additional water" parameter.  The "Bypass water present" system parameter is active and a bypass function is selected in the "Bypass brewing accelerator/Additional water" parameter.
2 x grind quantity 	0-9.9 sec	See "Grind quantity" parameter.  "Double beverage" is selected in the "Dispensing mode" parameter in the "Common settings".

### Milk settings



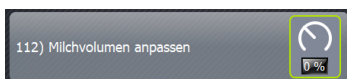
To adjust the volume of the milk and milk foam, the "Adjust milk volume" parameters must be changed.



See also "General settings".





Beverage-specific settings for milk volume are available in the "Individual beverage configuration".

- ▶ Select the "Configuration" main menu and the "Beverage configuration" menu.
- ▶ Select the beverage field that is to be adjusted.
  - The selection window for beverage adjustment opens.
- ▶ Select the "Modify beverage settings" submenu in the selection window.
  - "General settings" open in the "Single beverage setting".
- ▶ Using the control dial, set the milk volume in the "Adjust milk volume" parameter to the required value between -50% and 100%.
  - If a setting of e.g. -10% is made, the output volume of e.g. 250 ml is reduced to 225 ml.




If adjustments need to be made to the milk steps, the air pump must under no circumstances be adjusted manually during the last milk step to achieve the desired result. To do this, the "Air pump offset" parameter must be adjusted.


## Choco settings

Parameters: Choco settings		
Display text	Setting range	Description
Choco quantity 	40-999 ml	This setting defines the choco quantity for the beverage. The standard setting is 100 ml. "Choco + milk" is selected in "Powder system" under "System Parameters".
Flush water quantity 	20-50 ml	The flush water quantity after a chocolate beverage is dispensed: The flush water quantity set here is used to clean the chocolate output components every time a choco beverage is dispensed. The standard setting is 20 ml. The flush water is a part of the water quantity set in the "Choco quantity" parameter.
Choco dispenser 	Left Right	Selection menu for the chocolate dispenser. "2x choco" is selected in "Powder system" under "System Parameters".
Powder quantity (left, right, 2 x choco) 	20-100%	The entry in %controls the ratio between the powder quantity and water quantity. The higher the percentage setting, the greater the proportion of powder. This produces a stronger flavour. The standard setting is 50%.



## Hot water settings

Hot water settings parameter		
Display text	Setting range	Description
Water volume 	1-99 sec	Sets the dispensing time for the hot water quantity. The "Hot water" system parameter is activated. <i>The dispensing options are described in the "Dispensing mode" parameter in the "Common settings".</i>






## Steam settings



Parameters: Steam settings		
Display text	Setting range	Description
Dosing time 	1-99.9 sec	Steam dispensing duration setting The standard value is 90.0 sec. A steam system is selected in the "Steam outlet" system parameter. <i>The dispensing options are described in the "Dispensing mode" parameter in the "Common settings".</i>

### Flavour settings


Flavour settings parameter		
Display text	Setting range	Description
Flavour dosing time 1 Flavour dosing time 2 Flavour dosing time 3 Flavour dosing time 4 	0-60.0 sec	Defines the dosing time for the flavours on pumps 1, 2, 3 and 4.  The standard setting is 0.0 sec.  The Flavour Point must be selected in the system parameters.
Flavour 	Without flavour/ Set flavour/ Selection	Activates the adding of flavour and/or defines the flavour.  No flavour <input checked="" type="checkbox"/> No flavour added.  Selection <input checked="" type="checkbox"/> Flavour chosen during beverage selection.  Defined flavours, e.g. strawberry.  <input checked="" type="checkbox"/> Aroma is permanently defined. The flavours set in [TouchIT configuration] are available.  The Flavour Point must be selected in the system parameters.

### System settings


Parameters: System settings		
Display text	Setting range	Description
Machine number 	-	Input field for the machine number. <ul style="list-style-type: none"> <li>▶ Select the field. <input checked="" type="checkbox"/> The keypad appears.</li> <li>▶ Enter the machine number and confirm with the  field.</li> </ul> See the data under "Serial number" on the serial plate.
Customer number 	-	Entry field for the customer number. <ul style="list-style-type: none"> <li>▶ Select the field. <input checked="" type="checkbox"/> The keypad appears.</li> <li>▶ Enter the customer number and confirm with the  field.</li> </ul> The standard setting is (2).  The customer number can be used to define the location of the machine.  When using the CHEF, MONEY, MASTER and PROGRAM cards, the customer number is checked and must match the machine.  See "Accounting system" – "Payment systems" for further information.
24h time format 	On/off	Switches the 24h time format on/off.

Parameters: System settings		
Display text	Setting range	Description
Setting clock 	-	<ul style="list-style-type: none"> <li>▶ Select the [Set clock] field.</li> <li>▶ Select hour or minutes and set time using the arrow buttons.</li> </ul>
Set date 	-	<ul style="list-style-type: none"> <li>▶ Select the [Set date] field.</li> <li>▶ Select day, month or year and set date using the arrow buttons.</li> </ul>


## Automatic timer

Parameters: Machine timer		
Display text	Setting range	Description
Timer Monday 	24h: 00:00-23:59  12h: 00:00AM-11:59PM	Sets the machine timer. Switching on time: <ul style="list-style-type: none"> <li>▶ Activate the machine switching on time with the [On/Off] field.               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The field lights up green.</li> </ul> </li> <li>▶ Select the hour or minute range with your finger.</li> <li>▶ The left arrow field reduces the setting.</li> <li>▶ The right arrow field increases the setting.</li> </ul> Switch-off time: <ul style="list-style-type: none"> <li>▶ Activate the machine switch-off time with the [On/Off] field.               <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The field lights up green.</li> </ul> </li> <li>▶ Select the hour or minute range with your finger.</li> </ul> Arrow functions: <ul style="list-style-type: none"> <li>• The left arrow field reduces the setting.</li> <li>• The right arrow field increases the setting.</li> </ul> "00:00" is a valid setting. Select the desired time format in the "24h time format" parameter under "System settings".
Timer Tuesday Timer Wednesday Timer Thursday Timer Friday Timer Saturday Timer Sunday	24h: 00:00-23:59 12h: 00:00AM-11:59PM	<i>For settings, see the "Timer operation Monday" parameter.</i> "00:00" is a valid setting.

## Cleaning instructions

Cleaning instructions parameter		
Display text	Setting range	Description
Cleaning instructions 	00:00 – 23:59	Defines a time for the cleaning instructions.

## View mode

Screen design parameters		
Display text	Setting range	Description
View mode 	Barista Silver / Operator / Self-service	<ul style="list-style-type: none"> <li>▶ Select the desired design and confirm.</li> <li><input checked="" type="checkbox"/> The selected design will be activated after the machine is restarted.</li> </ul>

## Logo/Screen saver



The Touch Screen allows customised pictures to be used as a logo and screen saver. The function and the pictures must be set up by a service technician. It is possible to replace, activate and deactivate pictures with the CHEF card.

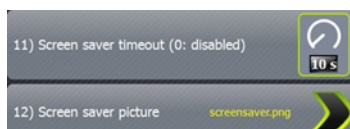


### Changing standby logo

- ▶ In [TouchIT configuration], select the [Logo] parameter.
  - A selection list with the saved pictures appears.
- ▶ Select the desired picture from the selection list.
- ▶ Save and remove the CHEF card.
  - The machine is restarted, and the new logo is displayed in standby mode.



*The pictures must be loaded onto the machine by a service technician.*



### Changing screensaver picture

- ▶ In [TouchIT configuration], select the [Screen saver timeout] parameter.
  - When the time > 0, the [Screen saver picture] parameter is shown.
- ▶ Define desired time.
- ▶ Select the [Screen saver picture] parameter.
  - A selection list with the saved pictures appears.
- ▶ Select the desired picture from the selection list.
- ▶ Save and remove the CHEF card.
  - Machine is restarted and the screen saver is shown with the selected picture after the corresponding time has elapsed.



*The pictures must be loaded onto the machine by a service technician.*

### Image and file formats

The following pixel dimensions apply to the image data:

- Images as a "logo" with max. 400 x 400 pixels and a size of <100 kB.
- Images as a slide show with max. 430 x 460 pixels and a size of <100 kB.
- Images as a "screen saver" with max. 480 x 800 pixels and a size of <100 kB.

The following file formats are supported:

- JPEG (.jpg) image compression is possible.
- BMP (.bmp) colour depth max. 8 bits.
- PNG (.png) for images with transparent areas.
- GIF (.gif) good lossless compression.
- MPEG-2 (.mpeg) video compression possible.

# Troubleshooting

General troubleshooting procedure:

- ▶ Switch the coffee machine off and, after several seconds, on again.
  - ☑ In most cases, the fault will be eliminated automatically.
- ▶ Repeat the steps that led to the fault.

If the fault occurs again:

- ▶ Find the fault in the following tables.
- ▶ Perform the described troubleshooting steps.

If the fault persists:

- ▶ Contact your service partner and describe the fault.



*If a fault occurs that is not described in this chapter, please contact your service partner immediately.*

## Faults in the Best Foam™ milk system

Fault	Cause	What to do
0) Milk foam appearance does not correspond to the reference.	Milk temperature does not correspond to the temperature during installation (> +3°C)	▶ Measure temperature. If necessary, adjust according to the deviation.
1) Problem with milk foam	Milk temperature does not correspond to the temperature during installation.	▶ Measure temperature. If necessary, adjust according to the deviation.
2) Foam too stiff	Incorrect milk temperature	▶ Measure temperature. If necessary, adjust according to the deviation.
	Too much air	▶ Reduce air.
3) Cold or cool beverages	Connection between Kombiprint and connector interrupted.	▶ Check connector.
4) Best Foam™ not working	Kink in silicone hoses upstream and/or downstream from the blender	▶ Check the silicone hoses. Rectify the fault as necessary.
5) Milk dispensed at an angle.	Beverage outlet contaminated.	▶ Reduce rinse interval (default = 60 min)
6) Beverage outlet partially blocked.	Machine is exposed to a draft. Beverage outlet contaminated.	▶ Reduce rinse interval (default = 60 min)
7) Milk sprays when a beverage is being dispensed.	Milk empty. Milk container monitoring activated? Beverage outlet contaminated.	▶ Switch the Best Foam™ System off and on again. The milk system is refilled. (Rinsing insufficient)
8) Beverage outlet moves jerkily.	Machine older than 38/2015	▶ Modification with 066368 (drawing 072390).

## Errors with display message

Display message	Cause	What to do
Left/right grinder overloaded	• Left/right grinder is overloaded.	▶ Check the grinder for foreign objects. ▶ If the message persists: Contact your service partner.
	• Left/right grinder is clogged.	
Grinder current fault	• PC board faulty. • Electronics defective.	▶ Contact your service partner.

Display message	Cause	What to do
Brewing unit current fault	<ul style="list-style-type: none"> <li>• PC board faulty.</li> <li>• Electronics defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Brewing motor overcurrent	<ul style="list-style-type: none"> <li>• Brewing unit is consuming too much power (over 4 A).</li> <li>• Brewing unit is blocked.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Water flow error	<ul style="list-style-type: none"> <li>• No water supply connection.</li> <li>• Pump defect. (pump pressure &lt; 7.5 bar)</li> <li>• The brewing unit is blocked.</li> <li>• Water system clogged.</li> <li>• Grinding level too fine.</li> <li>• PC board and flow meter incorrectly connected.</li> <li>• Electrical problem (e.g. PC board).</li> </ul>	<ul style="list-style-type: none"> <li>▶ Open the stopcock and press the beverage field again.</li> <li>▶ Check the brewing unit.</li> <li>▶ Check the grind mixture.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Crit. Coffee temp.	<ul style="list-style-type: none"> <li>• Electrical problem between sensor and PC board.</li> <li>• Temperature sensor defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Crit. Hot water temp.	<ul style="list-style-type: none"> <li>• Electrical problem between sensor and PC board.</li> <li>• Temperature sensor defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Crit. Steam temp.	<ul style="list-style-type: none"> <li>• Electrical problem between sensor and PC board.</li> <li>• Temperature sensor defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Coffee heater timeout	The set temperature of the coffee boiler was not reached within 4 minutes of the unit switching on.	<ul style="list-style-type: none"> <li>▶ Switch the machine off and back on.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Hot water heating timeout	The set temperature of the hot water boiler was not reached within 4 minutes of the unit switching on.	<ul style="list-style-type: none"> <li>▶ Switch the machine off and back on.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Steam heater timeout	The set temperature of the steam boiler was not reached within 4 minutes of the unit switching on.	<ul style="list-style-type: none"> <li>▶ Switch the machine off and back on.</li> <li>▶ If the message persists: Contact your service partner.</li> </ul>
Coffee sensor defective	<ul style="list-style-type: none"> <li>• Electrical problem between sensor and PC board.</li> <li>• Temperature sensor defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Hot water sensor defective	<ul style="list-style-type: none"> <li>• Electrical problem between sensor and PC board.</li> <li>• Temperature sensor defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Steam sensor defective	<ul style="list-style-type: none"> <li>• Electrical problem between sensor and PC board.</li> <li>• Temperature sensor defective.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Brewing unit timeout	The brewing unit motor does not run.	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Steam dispenser timeout	The level in the steam boiler was not reached.	<ul style="list-style-type: none"> <li>▶ Contact your service partner.</li> </ul>
Milk system disabled	The steam temperature has fallen to 115 °C.	<ul style="list-style-type: none"> <li>▶ Wait until the temperature has been reached again.</li> <li>▶ Switch the machine off and back on.</li> <li>▶ Contact your service partner.</li> </ul>
Initialising	<ul style="list-style-type: none"> <li>• The software and the processor are restarted.</li> <li>• The brewing unit moves into the initial position.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Switch the machine off and back on.</li> <li>▶ Contact your service partner.</li> </ul>

**Errors without display message**

Fault	Cause	What to do
Display dark	<ul style="list-style-type: none"> <li>• Machine is not connected to the mains supply.</li> <li>• Machine is not switched on.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check whether the machine is connected to the mains supply.</li> <li>▶ Check whether the machine is switched on.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
No milk	<ul style="list-style-type: none"> <li>• The milk container is empty.</li> <li>• The milk system is clogged.</li> <li>• The milk system was incorrectly disabled.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check whether the milk container is filled.</li> <li>▶ Perform the daily cleaning routine.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>
No milk foam	<ul style="list-style-type: none"> <li>• The milk container is empty.</li> <li>• The milk system is clogged.</li> <li>• The milk system was incorrectly disabled.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check whether the milk container is filled.</li> <li>▶ Perform the daily cleaning routine.</li> <li>▶ If the fault persists: Contact your service partner.</li> </ul>

# Precautionary measures

## Cleaning products

**CAUTION!**  
User at risk!



### Application

**Danger of poisoning from ingesting cleaning products.**  
Please adhere to the following points:

- Store cleaning products away from children and unauthorised persons.
- Do not swallow the cleaning products.
- Never mix cleaning products with other chemicals or acids.
- Never pour cleaning products into the milk container.
- Never pour cleaning products into the drinking water tank (internal/external).
- Only use the cleaning and descaling products for their intended purpose (see label).
- Do not eat or drink while handling cleaning products.
- Ensure that the area is well ventilated when handling cleaning products.
- Wear safety gloves when handling cleaning products.
- Wash your hands thoroughly after handling cleaning products.



*Before using cleaning products, read the information on the packaging carefully. If not available, the HEALTH & SAFETY DATA SHEET can be obtained from the sales partner (see the cleaning product packaging).*

### Storage

Please adhere to the following points:

- Store in a place that is inaccessible to children and unauthorised persons.
- Protect cleaning products from heat, light and moisture.
- Store in a separate location from acids.
- Only store in the original packaging.
- Store cleaning products separately from each other.
- Do not store together with foodstuffs or other similar items.
- Local regulations regarding the storage of chemicals (cleaning products) apply.

### Disposal

If recycling is not possible, cleaning agents and their containers must be disposed of in accordance with local and statutory regulations.

### Emergency information

Obtain the phone number of the emergency information service (toxicological information centre) from the cleaning product manufacturer (see cleaning product label). If your country does not have this type of institution, please see the following table:

Swiss Toxicological Information Centre	
International calls	+41 44 251 51 51
Calls from Switzerland	145
Internet	www.toxi.ch

## Hygiene regulations

### Water

**CAUTION!**  
User at risk!



**Improper handling of water can cause health problems.**  
**Please adhere to the following points:**

- The water must be uncontaminated.
- Do not connect the machine to pure reverse osmosis water or other aggressive types of water.
- The carbonate hardness must not exceed 5 - 6°dKH (German carbonate hardness) or 8.9 - 10.7°fKH (French carbonate hardness).
- The total hardness must always be higher than the carbonate hardness.
- The minimum carbonate hardness is 5°dKH or 8.9 °fKH.
- Maximum chlorine content of 50 mg per litre.
- pH value between 6.5 and 7 (pH neutral).

For machines with drinking water tank (internal & external):

- Fill the drinking water tank with fresh water daily.
- Rinse the drinking water tank thoroughly before filling.

### Coffee

**CAUTION!**  
User at risk!



**Improper handling of coffee can cause health problems.**  
**Please adhere to the following points:**

- Check the packaging for damage before opening.
- Do not add more coffee beans than will be needed for one day.
- Close the bean hopper lid immediately after filling.
- Store coffee in a cool, dry, dark place.
- Store coffee separately from cleaning products.
- Use up the oldest products first ("first in, first out" principle).
- Use products before the expiry date.
- Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

### Milk

**CAUTION!**  
User at risk!



**Improper handling of milk can cause health problems!**  
**Please adhere to the following points:**

- Do not use unpasteurised or raw milk.
- Only use pasteurised or UHT milk.
- Only use homogenised milk.
- Use pre-cooled milk at a temperature between 3 – 5°C.
- When working with milk, wear protective gloves.
- Use milk directly from the original packaging.
- Never add additional milk. Always clean the container thoroughly before filling.
- Check the packaging for damage before opening.
- Do not add more milk than will be needed for one day.
- Close the milk container cover and cooling unit (internal/external) immediately after filling.
- Store milk in a cool, dry (max. 7°C) and dark place.
- Store milk separately from cleaning products.
- Use up the oldest products first ("first in, first out" principle).
- Use products before the expiry date.
- Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

## Automatic machine powder/instant powder

**CAUTION!**  
User at risk!



**Improper use of automatic machine powder can be hazardous to health!**  
**Please adhere to the following points:**

- Check the packaging for damage before opening.
- Do not fill the machine with more automatic machine powder than will be needed for one day.
- Close the powder container lid immediately after filling.
- Store the automatic machine powder in a cool, dry, dark place.
- Store the coffee machine powder separately from cleaning products.
- Use up the oldest products first ("first in, first out" principle).
- Use products before the expiry date.
- Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

## Syrup

**CAUTION!**  
User at risk!



**Improper handling of syrup can lead to health problems.**  
**Please adhere to the following points:**

- Use syrup directly from the original packaging.
- Check the packaging for damage before opening.
- Close the Flavour Point immediately after filling.
- Store the syrup in a cool, dry, dark place.
- Store syrup separately from cleaning products.
- Use up the oldest products first ("first in, first out" principle).
- Use products before the expiry date.
- Always reseal packages properly after opening to ensure that the contents remain fresh and are protected from contamination.

# Liability

## Operating company responsibilities

The operating company must ensure that the machine undergoes regular maintenance and that the safety devices are checked regularly by a Schaeerer AG service partner, a representative thereof, or other authorised persons.

Schaeerer AG must be notified in writing of any defects with 30 days. For hidden defects, this period is extended to 12 months from the date of installation (work report, handover report), but no longer than 18 months after the product leaves the factory in Zuchwil.

Safety-relevant parts such as safety valves, safety thermostats, boilers etc. must not be repaired under any circumstances. They must be replaced!

The following intervals apply:

- Safety valves: every 12 months.
- Boilers (steam boilers, continuous flow heaters) – every 60 months.

These measures are performed by a Schaeerer AG service technician or your service partner as part of the maintenance routine.

## Warranty and liability claims

No responsibility will be taken for warranty or liability claims in the event of personal injury or material damage as a result of one or more of the following causes:

- Improper use of the machine.
- Improper installation, commissioning, operation, cleaning and maintenance of the machine and the associated optional devices.
- Failure to observe maintenance intervals.
- Operation of the machine with safety devices that are defective or safety and protective equipment that is not properly installed or is not functional.
- Failure to observe the safety notes in the operating instructions pertaining to storage, installation, commissioning, operation and maintenance of the machine.
- Operation of the machine when it is not in good working condition.
- Repairs that have not been carried out properly.
- Use of spare parts that are not original Schaeerer AG spare parts.
- Use of cleaning products that are not recommended by Schaeerer AG.
- Catastrophic incidents due to foreign objects, accidents, vandalism or force majeure.
- Penetration of the machine with any type of object or opening of the housing.

The manufacturer shall only and exclusively accept liability or honour liability claims if the specified maintenance and service intervals are adhered to and if original spare parts have been used that were ordered from the manufacturer or another authorised supplier.



*The "General Terms and Conditions" of Schaeerer AG apply.*